



14421 County Road 10 • Fort Lupton, Colorado 80621 • (303) 857-9999 • FAX (303) 857-0577 • E-MAIL LSPermitco@aol.com

June 18, 2001

Division of Oil, Gas & Mining
1594 West North Temple, Suite 1210
Box 145801
Salt Lake City, UT 84114-5801

Attn: John Baza

Re: Tom Brown, Inc.
Lisbon (McCracken) A-610
1221' FNL and 1260' FWL
NW NW Sec. 10, T30S - R24E
San Juan County, Utah
Lease No. UTU-0014903

Dear John,

Enclosed please find three copies of the A.P.D. for the above mentioned well along with one copy of the Onshore Order No. 1 which has been filed with the BLM office in Moab, Utah.

If you should have any questions regarding the enclosed material, please don't hesitate to contact me. Your early approval of this application would be greatly appreciated.

Sincerely,

PERMITCO INC.

Lisa L. Smith
Consultant for:
Tom Brown, Inc.

Enc.

cc: Tom Brown, Inc. - Denver, CO
Tom Brown, Inc. - Grand Junction, CO
Tom Brown, Inc. - Moab, UT

RECEIVED

JUN 19 2001

DIVISION OF
OIL, GAS AND MINING

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

APPLICATION FOR PERMIT TO DRILL OR REENTER


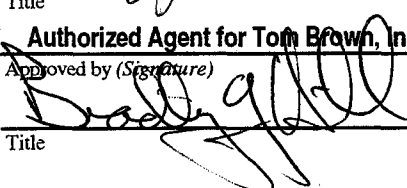
FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

1a. Type of Work: <input checked="" type="checkbox"/> DRILL <input type="checkbox"/> REENTER		5. Lease Serial No. UTU-0014903
b. Type of Well: <input checked="" type="checkbox"/> Oil Well <input type="checkbox"/> Gas Well <input type="checkbox"/> Other <input checked="" type="checkbox"/> Single Zone <input type="checkbox"/> Multiple Zone		6. If Indian, Allottee or Tribe Name N/A
2. Name of Operator Tom Brown, Inc.		7. If Unit or CA Agreement, Name and No. Lisbon (McCracken) Unit
3A. Address 303/260-5000 555 - 17th St., Suite 1850 Denver, CO 80621		8. Lease Name and Well No. Lisbon (McCracken) A-610
3A. Address 303/857-9999 14421 County Road 10 Ft. Lupton, CO 80621		9. API Well No. 43-037-31821
4. Location of Well (Report location clearly and in accordance with any State requirements. *) At surface 1221' FNL & 1260' FWL At proposed prod. Zone NW NW 4228789 N 650681 E		10. Field and Pool, or Exploratory Lisbon Field
14. Distance in miles and direction from nearest town or post office* 36.7 miles southeast of Moab, UT		11. Sec., T., R., M., or Blk. and Survey or Area Section 10, T30S-R24E
15. Distance from proposed* location to nearest property or lease line, ft. (Also to nearest drig. unit line, if any) 1260'	16. No. of Acres in lease 560	17. Spacing Unit dedicated to this well 40
18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft. Approx. 900'	19. Proposed Depth 8550'	20. BLM/BIA Bond No. on file ESO-183
21. Elevations (Show whether DF, KDB, RT, GL, etc.) 6509'	22. Approximate date work will start* 8/22/2001	23. Estimated duration 36 days

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

- | | |
|--|---|
| 1. Well plat certified by a registered surveyor. | 4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above). |
| 2. A Drilling Plan. | 5. Operator certification. |
| 3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office. | 6. Such other site specific information and/or plans as may be required by the authorized office. |

25. Signature 	Name (Printed/Typed) Lisa L. Smith	Date 6/18/2001
Title Authorized Agent for Tom Brown, Inc.		
Approved by (Signature) 	Name (Printed/Typed) BRADLEY G. HILL	Date 06-21-01
Title RECLAMATION SPECIALIST III		

Application approval does not warrant or certify that the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and Title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

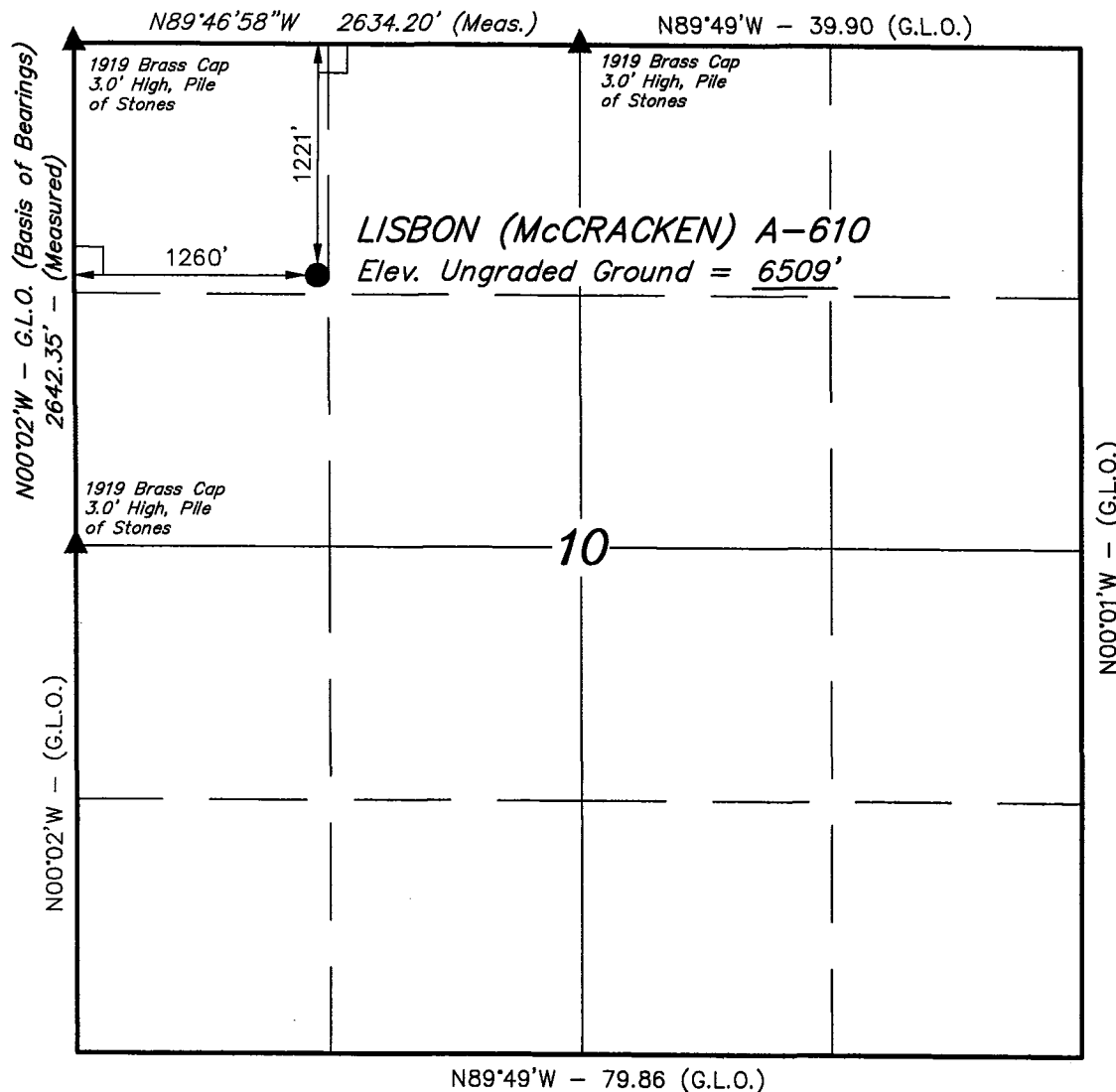
*(Instructions on reverse)

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JUN 19 2001

**DIVISION OF
OIL, GAS AND MINING**

T30S, R24E, S.L.B.&M.



LEGEND:

- └─ = 90° SYMBOL
- = PROPOSED WELL HEAD.
- ▲ = SECTION CORNERS LOCATED.

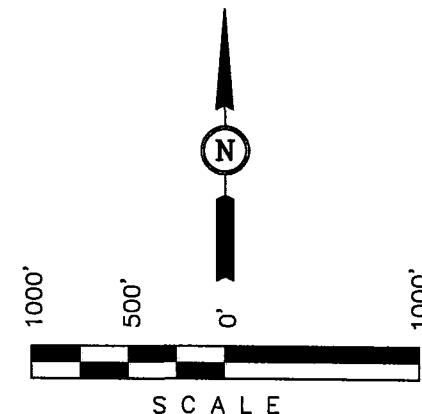
LATITUDE = 38°11'46"
LONGITUDE = 109°16'46"

TOM BROWN INC.

Well location, LISBON (McCRACKEN) A-610, located as shown in the NW 1/4 NW 1/4 of Section 10, T30S, R24E, S.L.B.&M. San Jaun County, Utah.

BASIS OF ELEVATION

SPOT ELEVATION LOCATED AT THE ROAD INTERSECTION IN THE NE 1/4 OF SECTION 16, T30S, R24E, S.L.B.&M. TAKEN FROM THE SANDSTONE DRAW QUADRANGLE, UTAH, SAN JAUN COUNTY, 7.5 MINUTE QUAD. (TOPOGRAPHIC MAP) PUBLISHED BY THE UNITED STATES DEPARTMENT OF THE INTERIOR, GEOLOGICAL SURVEY. SAID ELEVATION IS MARKED AS BEING 6140 FEET.



CERTIFICATE

THIS IS TO CERTIFY THAT THE ABOVE PLAT WAS PREPARED FROM FIELD NOTES OF ACTUAL SURVEYS MADE BY ME OR UNDER MY SUPERVISION AND THAT THE SAME ARE TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF.

Robert L. Kay
REGISTERED LAND SURVEYOR
REGISTRATION NO. 161318
STATE OF UTAH

Revised: 03-16-01 D.R.B.

UINTAH ENGINEERING & LAND SURVEYING
85 SOUTH 200 EAST - VERNAL, UTAH 84078
(435) 789-1017

SCALE 1" = 1000'	DATE SURVEYED: 02-26-01	DATE DRAWN: 03-02-01
PARTY B.B. J.W. D.R.B.	REFERENCES G.L.O. PLAT	
WEATHER COLD	FILE TOM BROWN INC.	

APPLICATION FOR PERMIT TO DRILL OR REENTER

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered survey.

ATTACHED

2. A Drilling Plan

Tom Brown, Inc. proposes to drill a well to 8550' to test the McCracken Sandstone formation. If productive, casing will be run and the well completed. If dry, the well will be plugged and abandoned as per BLM and state of Utah requirements. See Onshore Order No. 1 attached.

3. A Surface Use Plan (if the location is on National Forest System Lands, the SUPO shall be filed with the Appropriate Forest Service Office.

ATTACHED

4. Bond to cover the operations unless covered by an existing bond on file (see Item 20).

Tom Brown, Inc. has been designated by proper lease interest owner to conduct operations on the above mentioned lease. Bonding by Tom Brown, Inc. is covered under their Nationwide Bond No. ESO-183.

5. Operator certification.

Tom Brown, Inc. is considered to be the Operator of the above mentioned well. Tom Brown, Inc. agrees to be responsible under the terms and conditions of the lease for the operations conducted upon the leased lands.

6. Such other site specific information and/or plans as may be required by the authorized officer.

ONSHORE OIL & GAS ORDER NO. 1

Approval of Operations on Onshore
Federal and Indian Oil & Gas Leases

Lisbon (McCracken) A-610
1221' FNL and 1260' FWL
NW NW Sec. 10, T30S - R24E
San Juan County, Utah

Prepared For:

TOM BROWN, INC.

By:

PERMITCO INC.
14421 County Road #10
Ft. Lupton, Colorado 80621
303/857-9999

Copies Sent To:

- 
- 4 - BLM - Moab, UT
 - 1 - Utah Division of Oil, Gas & Mining - SLC, UT
 - 3 - Tom Brown, Inc. - Denver, CO
 - 1 - Tom Brown, Inc. - Grand Junction
 - 1 - Tom Brown, Inc. - Moab, Utah



TOM BROWN INC.
LISBON (McCRACKEN) A-610
LOCATED IN SAN JUAN COUNTY, UTAH
SECTION 10, T30S, R24E, S.L.B.&M.

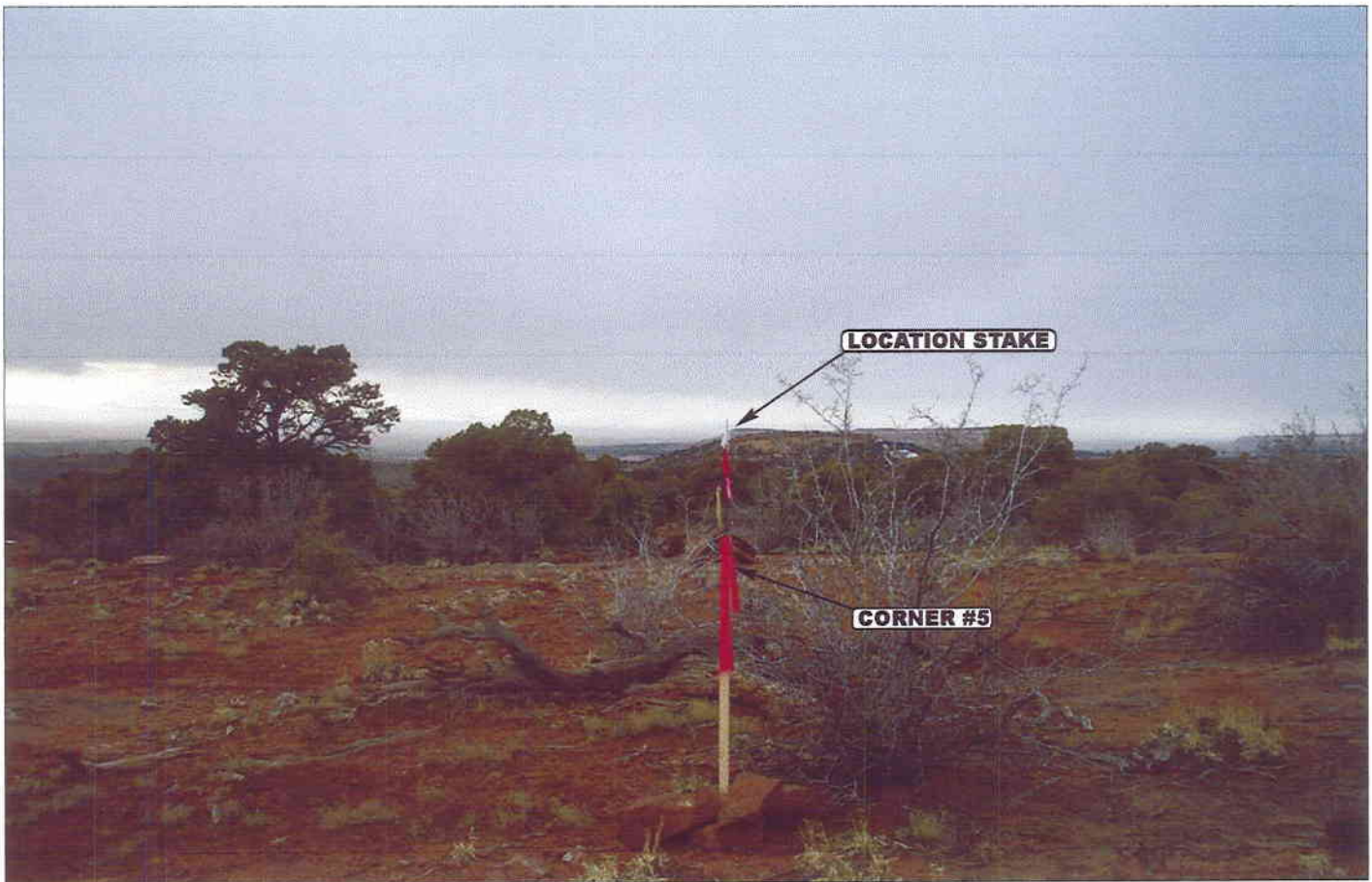


PHOTO: VIEW FROM CORNER #5 TO LOCATION STAKE

CAMERA ANGLE: WESTERLY



- Since 1964 -

UELS Uintah Engineering & Land Surveying
85 South 200 East Vernal, Utah 84078
435-789-1017 uels@uelsinc.com

LOCATION PHOTOS

3 6 01
MONTH DAY YEAR

PHOTO

TAKEN BY: B.B.

DRAWN BY: KG.

REVISED: 3-16-01

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Lisbon (McCracken) A-610

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ONSHORE ORDER NO. 1

Tom Brown, Inc.

Lisbon (McCracken) A-610

1221' FNL and 1260' FWL

NW NW Sec. 10, T30S - R24E

San Juan County, Utah

Lease No. UTU-0014903

DRILLING PROGRAM

Page 1

ONSHORE OIL & GAS ORDER NO. 1
Approval of Operations on Onshore
Federal and Indian Oil and Gas Leases

All lease and/or unit operations will be conducted in such a manner that full compliance is made with applicable laws, regulations (43 CFR 3100), Onshore Oil and Gas Order No. 1, and the approved plan of operations. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.

1. ESTIMATED TOPS/ GEOLOGIC MARKERS

The estimated tops of important geologic markers are as follows:

<i>Formation</i>	<i>Depth</i>	<i>Subsea</i>
Upper Ismay Anhydrite	3992'	2429'
Upper Ismay Carbonate	4021'	2400'
Lower Ismay Anhydrite	4022'	2401'
Paradox Salt	4269'	2152'
Pinkerton Trail	7447'	-1026'
Leadville	7721'	-1300'
Ouray	8116'	-1695'
Elbert	8254'	-1833'
McCracken Sandstone	8401'	-1980'
Aneth Shale	8514'	-2093'
T.D.	8550'	-2129'



2. ESTIMATED DEPTH OF OIL, GAS WATER AND OTHER MINERAL BEARING ZONES

The estimated depths at which the top and bottom of the anticipated water, oil, gas or other mineral bearing formations are expected to be encountered are as follows:

<i>Substance</i>	<i>Formation</i>	<i>Depth</i>
Water	Upper Ismay Carbonate	4021'
Gas	Leadville	7721'
Oil	McCracken Sandstone	8401'

All fresh water and prospectively valuable minerals encountered during drilling, will be recorded by depth and will be cased and cemented. When possible, water flow rates will be measured and samples will be taken and analyzed with the results being submitted to the BLM. All oil and gas shows will be tested to determine commercial potential.

3. BOP EQUIPMENT

Tom Brown, Inc.'s minimum specifications for pressure control equipment are as follows:

Ram Type: 11" Hydraulic double, 3000 psi w.p.

BOP systems will be consistent with API RP 53 and Onshore Oil and Gas Order No. 2. Pressure tests of the surface casing and all BOP equipment potentially subject to pressure will be conducted before drilling the surface casing shoe. Blowout preventer controls will be installed prior to drilling the surface casing shoe and will remain in use until the well is completed or abandoned. Ram preventers will be inspected and operated each trip (no more than once a day is necessary), and annular preventers will be inspected and operated weekly to ensure good mechanical working order. These inspections shall be recorded in the drilling log and in the daily drilling report.

Ram type preventers and associated equipment shall be tested to approved stack working pressure if isolated by test plug or to 70 percent of internal yield pressure of casing. Pressure shall be maintained for at least 10 minutes or until requirements of test are met, whichever is longer. If a test plug is utilized, no bleed-off pressure is acceptable. For a test not utilizing a test plug, if a decline in pressure of more than 10 percent in 30 minutes occurs, the test shall be considered to have failed.



Valve on casing head below test plug shall be open during test of BOP stack.

Annular type preventers (if used) shall be tested to 50 percent of rated working pressure. Pressure shall be maintained at least 10 minutes or until provisions of test are met, whichever is longer.

Valves shall be tested from working pressure side during BOPE tests with all down stream valves open.

When testing the kill line valve(s) the check valve shall be held open or the ball removed.

A BOPE pit level drill shall be conducted weekly for each drilling crew.

The BOP and related equipment shall meet the minimum requirements of Onshore Oil and Gas Order No. 2 for equipment and testing requirements, procedures, etc., and individual components shall be operable as designed. Chart recorders shall be used for all pressure tests.

Pressure tests shall apply to all related well control equipment.

All of the above described tests and/or drills shall be recorded in the drilling log. Test charts, with individual test results identified, shall be maintained on location while drilling and shall be made available to a BLM representative upon request.

Pressure tests shall apply to all related well control equipment.

- a. The size and rating of the BOP stack is shown on the attached diagram. Although a rig has not been chosen to drill this well, most of the equipment for this depth of hole in the area use a 11", 3000 psi working pressure blowout preventor.
- b. A choke line and a kill line are to be properly installed. The kill line is not to be used as a fill-up line.
- c. The accumulator system shall have a pressure capacity to provide for repeated operation of hydraulic preventers.
- d. Drill string safety valve(s), to fit all tools in the drill string, are to be maintained on the rig floor while drilling operations are in progress.



4. CASING AND CEMENTING PROGRAM

- a. The proposed casing and cementing program shall be conducted as approved to protect and/or isolate all usable water zones, potentially productive zones, lost circulation zones, abnormally pressured zones, and any prospectively valuable deposits of minerals. Any isolating medium other than cement shall receive approval prior to use. The casing setting depth shall be calculated to position the casing seat opposite a competent formation which will contain the maximum pressure to which it will be exposed during normal drilling operations. Determination of casing setting depth shall be based on all relevant factors, including; presence/absence of hydrocarbons; fracture gradients; usable water zones; formation pressures; lost circulation zones; other minerals; or other unusual characteristics. All indications of usable water shall be reported.
- b. Casing design shall assume formation pressure gradients of 0.44 to 0.50 psi per foot for exploratory wells (lacking better data).
- c. Casing design shall assume fracture gradients from 0.70 to 1.00 psi per foot for exploratory wells (lacking better data)
- d. Casing collars shall have a minimum clearance of 0.422 inches of all sides in the hole/casing annulus, with recognition that variances can be granted for justified exceptions.
- e. All waiting on cement times shall be adequate to achieve a minimum of 500 psi compressive strength at the casing shoe prior to drilling out.
- f. All casing except the conductor casing, shall be new or reconditioned and tested used casing that meets or exceeds API standards for new casing.
- g. The surface casing shall be cemented back to surface either during the primary cement job or by remedial cementing.
- h. All indications of usable water shall be reported to the authorized officer prior to running the next string of casing or before plugging orders are requested, whichever occurs first.
- i. Three centralizers will be run on the bottom three joints of surface casing with a minimum of one centralizer per joint starting with the shoe joint.
- j. Top plugs shall be used to reduce contamination of cement by displacement fluid. A bottom



plug or other acceptable technique, such as a suitable preflush fluid, inner string cement method, etc. shall be utilized to help isolate the cement from contamination by the mud fluid being displaced ahead of the cement slurry.

- k. All casing strings below the conductor shall be pressure tested to 0.22 psi per foot of casing string length or 1500 psi, whichever is greater, but not to exceed 70 percent of the minimum internal yield. If pressure declines more than 10 percent in 30 minutes, corrective action shall be taken.
- l. On all exploratory wells, and on that portion of any well approved for a 5M BOPE system or greater, a pressure integrity test of each casing shoe shall be performed. Formation at the shoe shall be tested to a minimum of the mud weight equivalent anticipated to control the formation pressure to the next casing depth or at total depth of the well. This test shall be performed before drilling more than 20 feet of new hole.
- m. The proposed casing program will be as follows:

Purpose	Depth	Hole Size	O.D.	Weight	Grade	Type	New/Used
Surface	0-1025'	12-1/4"	9-5/8"	36#	J-55	ST&C	New
Production	0'-8550'	7-7/8"	5-1/2"	17#	L-80	LT&C	New

- o. Casing design subject to revision based on geologic conditions encountered.
- p. The cement program will be as follows:

Surface	Type and Amount
0-1025'	Lead: 170 sx Prem. Lite III, 11.8#, 2.32 yield Tail: 180 sx A, 14.6#, 1.39 yield, or sufficient to circulate to surface.
Production	Type and Amount
3700'-8550'	Lead: 50 sx Prem. Lite III, 11.0#, 3.1 yield Tail: 560 sx 65/35/6 type III, 13.0#, 1.84 yield. Estimated top of cement @ 3700'.



- q. After cementing but before commencing any test, the casing string shall stand cemented until the cement has reached a compressive strength of at least 500 psi at the shoe. WOC time shall be recorded in the driller's log.
- r. The following reports shall be filed with the District Manager within 30 days after the work is completed.
 - 1. Progress reports, Form 3160-5 (formerly 9-331) "Sundry Notices and Reports on Wells", must include complete information concerning:
 - a. Setting of each string of casing, showing the size, grade, weight of casing set, hole size, setting depth, amounts and type of cement used, whether cement circulated or the top of the cement behind the casing, depth of cementing tools used, casing test method and results, and the date work was done. Show the spud date on the first reports submitted.
 - b. Temperature or bond logs must be submitted for each well where the casing cement was not circulated to the surface.
- s. Auxiliary equipment to be used is as follows:
 - 1. Kelly cock
 - 2. No bit float is deemed necessary.
 - 3. A sub with a full opening valve.

5. MUD PROGRAM

- a. The proposed circulating mediums to be employed in drilling are as follows:

<i>Interval</i>	<i>Mud Type</i>	<i>Mud Wt.</i>	<i>Visc.</i>	<i>F/L</i>
0' - 1025'	Water	+/-8.6	+/-28	N/C
1025' - 4000'	LSND	+/-9	+/-32	+/-12
4000' - 8550'	Salt Mud	+/-10.4	+/-45	+/-8



Sufficient mud materials will be stored on location to maintain well control and combat lost circulation problems that might reasonably be expected.

- b. Due to potential for contamination of usable quality water aquifers, chromates are banned from Federal leases.
- c. Hazardous substances specifically listed by the EPA as a hazardous waste or demonstrating a characteristic of a hazardous waste will not be used in drilling, testing or completion operations.

6. EVALUATION PROGRAM

The anticipated type and amount of testing, logging and coring are as follows:

- a. No drill stem tests are anticipated. However, if DST's are run, the following requirements will be adhered to:

Initial opening of drill stem test tools shall be restricted to daylight hours unless specific approval to start during other hours is obtained from the authorized officer. However, DST's may be allowed to continue at night if the test was initiated during daylight hours and the rate of flow is stabilized and if adequate lighting is available (i.e. lighting which is adequate for visibility and vapor-proof for safe operations). Packers can be released, but tripping shall not begin before daylight, unless prior approval is obtained from the authorized officer. Closed chamber DSTs may be accomplished day or night.

A DST that flows to the surface with evidence of hydrocarbons shall be either reversed out of the testing string under controlled surface conditions. This would involve provided some means for reverse circulation.

Separation equipment required for the anticipated recovery shall be properly installed before a test starts.

All engines within 100 feet of the wellbore that are required to "run" during the test shall have spark arresters or water cooled exhausts.

- b. The logging program will consist of a GR/ILD/DEN/NEUT/SON depths.



- c. No cores are anticipated.
- d. Whether the well is completed as a dry hole or as a producer, "Well Completion and Recompletion Report and Log" (Form 3160-4) will be submitted not later than 30 days after completion of the well or after completion of operations being performed, in accordance with 43 CFR 3164. Two copies of all logs, core descriptions, core analyses, well-test data, geologic summaries, sample description, and all other surveys or data obtained and compiled during the drilling, workover, and/or completion operations, will be filed with form 3160-4. Samples (cuttings, fluids, and/or gases) will be submitted when requested by the authorized officer (AO).
- e. The anticipated completion program is as follows:

Perforate zones of interest. Frac and acidize as necessary and place on production.

7. ANTICIPATED PRESSURES AND H₂S

- a. The expected maximum bottom hole pressure is 3702 psi. No abnormal pressures are anticipated.
- b. Hydrogen sulfide gas is anticipated in the Leadville formation. A H₂S Contingency Plan will be submitted under separate cover by Standby Safety.
- c. As per Onshore Order No. 6, III,A,2.b., if hydrogen sulfide is present the "operator shall initially test the H₂S concentration of the gas stream for each well or production facility..." Submit the results of this test within 30 days of filing Form 3160-4, "Well Completion or Recompletion Report and Log".

8. OTHER INFORMATION AND NOTIFICATION REQUIREMENTS

- a. Should the well be successfully completed for production, the AO will be notified when the well is placed in a producing status. Such notification will be sent by telegram or other written communications, not later than 5 days following the date on which the well is placed on production.
- b. Production data shall be reported to the MMS pursuant to 30 CFR 216.5 using form MMS/3160.



- c. The date on which production is commenced or resumed will be construed for oil wells as the date on which liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or, the date on which liquid hydrocarbons are first produced into a permanent storage facility, whichever first occurs; and, for gas wells as the date on which associated liquid hydrocarbons are first sold or shipped from a temporary storage facility, such as a test tank, and for which a run ticket is required to be generated or the date on which gas is first measured through permanent metering facilities, whichever first occurs.
- d. Pursuant to NTL-4A, lessees or operators are authorized to vent/flare gas during initial well evaluation tests, not exceeding a period of 30 days or the production of 50 MMCF of gas, whichever occurs first. An application must be filed with the District Engineer and approval received, for any venting/flaring of gas beyond the initial 30 day or authorized test period.
- e. Gas produced from this well may not be vented or flared beyond an initial authorized test period of 30 days or 50 MMCF following its completion, whichever occurs first, without the prior written approval of the Authorized Officer. Should gas be vented or flared without approval beyond the authorized test period, the operator may be directed to shut-in the well until the gas can be captured or the operator shall be required to compensate the lessor for that portion of the gas vented or flared without approval which is determined to have been avoidably lost.
- f. A schematic facilities diagram as required by 43 CFR 3162.7-2, 3162.7-3 and 3162.7-4 shall be submitted to the appropriate District Office within 30 days of installation or first production, whichever occurs first. All site security regulations as specified in 43 CFR 3162.7 and Onshore Order No. 3 shall be adhered to. All product lines entering and leaving hydrocarbon storage tanks will be effectively sealed in accordance with 43 CFR 3162.7-4.
- g. Section 102(b)(3) of the Federal Oil and Gas Royalty Management Act of 1982, as implemented by the applicable provisions of the operating regulations at Title 43 CFR 3162.4-1(c), requires that "not later than the 5th business day after any well begins production on which royalty is due anywhere on a lease site or allocated to a lease site, or resumes production in the case of a well which has been off production for more than 90 days, the operator shall notify the authorized officer by letter or sundry notice, Form 3160-5, or orally to be followed by a letter or sundry notice, of the date on which such production has begun or resumed."

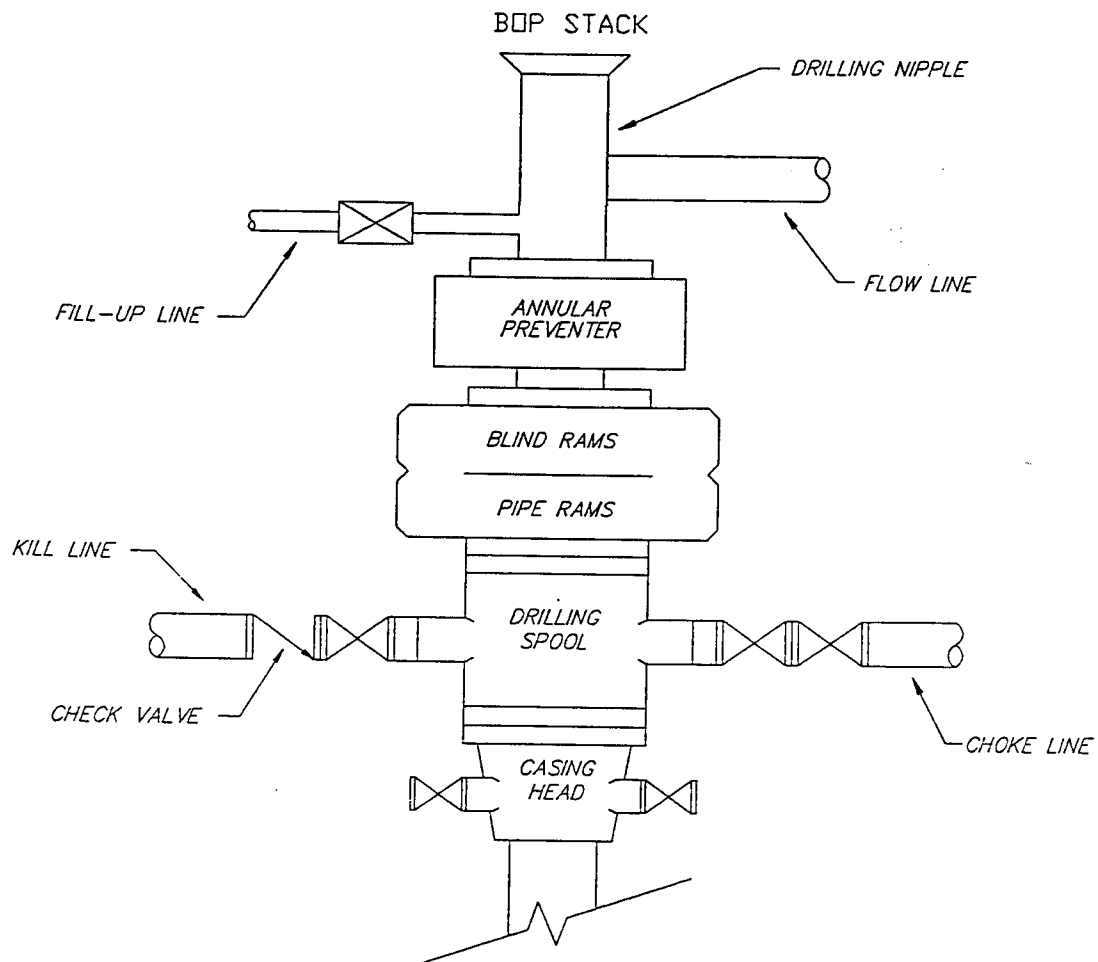


If you fail to comply with this requirement in the manner and time allowed, you shall be liable for a civil penalty of up to \$10,000 per violation for each day such violation continues, not to exceed a maximum of 20 days. See Section 109(c)(3) of the Federal Oil and Gas Royalty Management Act of 1982 and the implementing regulations at Title 43 CFR 3162.4-1(b)(5)(ii).

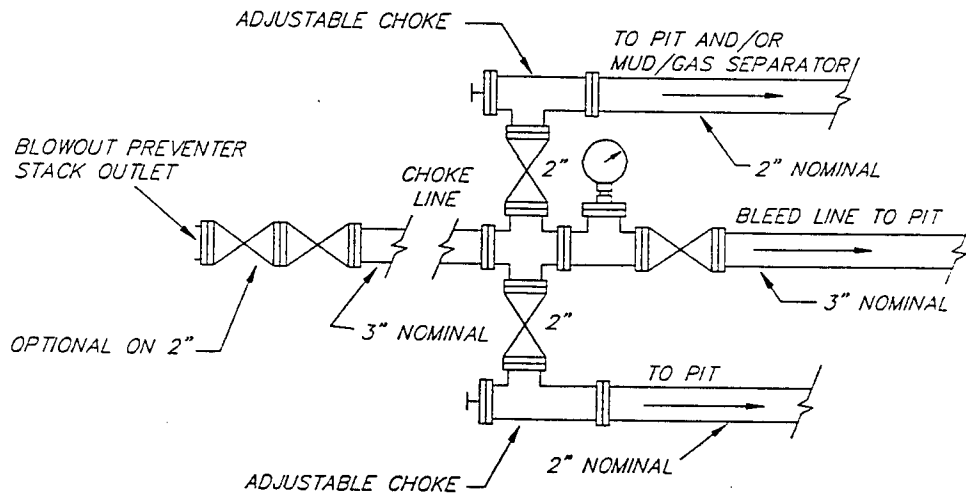
- h. Drilling operations are planned to commence on immediately upon approval of this application.
- i. It is anticipated that the drilling of this well will take approximately 36 days.
- j. No location will be constructed or moved, no well will be plugged, and no drilling or workover equipment will be removed from a well to be placed in a suspended status without prior approval of the AO. If operations are to be suspended, prior approval of the AO will be obtained and notification given before resumption of operations.
- k. Immediate Report: Spills, blowouts, fires, leaks, accidents, or any other unusual occurrences shall be promptly reported in accordance with the requirements of NTL-3A or its revision.
- l. If a replacement rig is contemplated for completion operations, a "Sundry Notice" Form 3160-5 to that effect will be filed, for prior approval of the AO, and all conditions of this approved plan are applicable during all operations conducted with the replacement rig.
- m. Pursuant to Onshore Order No. 7, with the approval of the District Engineer, produced water may be temporarily disposed of into unlined pits for a period of up to 90 days. During the period so authorized, an application for approval of the permanent disposal method, along with the required water analysis and other information, must be submitted to the District Engineer.
- n. No well abandonment operations will be commenced without the prior approval of the AO. In the case of newly drilled dry holes or failures, and in emergency situations, oral approval will be obtained from the SO. A "Subsequent Report of Abandonment" Form 3160-5, will be filed with the AO within 30 days following completion of the well for abandonment. This report will indicate where plugs were placed and the current status of surface restoration. Final abandonment will not be approved until the surface reclamation work required by the approved APD or approved abandonment notice has been completed to the satisfaction of the AO or his representative. or the appropriate Surface Managing Agency.



TYPICAL 3,000 p.s.i.
BLOWOUT PREVENTER SCHEMATIC



TYPICAL 3,000 p.s.i.
CHOKE MANIFOLD SCHEMATIC



ONSHORE ORDER NO. 1
Tom Brown, Inc.
Lisbon (McCracken) A-610
1221' FNL and 1260' FWL
NW NW Sec. 10, T30S - R24E
San Juan County, Utah

Lease No. UTU-0014903

SURFACE USE PLAN

Page 1

ONSHORE OIL & GAS ORDER NO. 1
Thirteen Point Surface Use Plan

An onsite inspection of the subject well was conducted on Friday, March 9, 2001 at approximately 9:10 a.m. Weather conditions were cool and overcast. In attendance at the onsite inspection were the following individuals:

Rich McClure	Bureau of Land Management
Eric Jones	Bureau of Land Management
Marie McCann	Bureau of Land Management
Robert Kay	Uintah Engineering and Land Surveying
Lisa Smith	Permitco Inc.
Jerry Holder	Tom Brown, Inc.
Rick Costanza	Tom Brown, Inc.
Mike Shumway	K-Sue Corporation
Jim Keel	K-Sue Corporation

1. EXISTING ROADS

- a. The proposed well site is located approximately 36.7 miles southeast of Moab, Utah.
- b. Directions to the location from Moab, Utah are as follows:

From, Moab, Utah at the McDonald's, proceed south on Highway 191 for 30.2 miles to mile marker 96. Turn left and proceed east on County Road 114 for 5.7 miles. At the fork, turn left on County Road 303 and proceed northerly for 0.7 miles. Turn left onto new access road and proceed southerly for 0.2 miles to the location.
- c. For location of access roads within a 2-Mile radius, see Maps A & B.
- d. Improvement to the existing access will not be necessary since this is a county maintained road.
- e. All existing roads will be maintained and kept in good repair during all drilling and completion operations associated with this well.



- f. Existing roads and newly constructed roads on surface under the jurisdiction of any Surface Managing Agency shall be maintained in accordance with the standards of the SMA.

2. PLANNED ACCESS ROADS

- a. There will be approximately 0.2 miles of new access road.
- b. The existing access is currently maintained by Tom Brown, Inc.
- c. The maximum grade of the existing access is approximately 7%.
- d. No turnouts will be necessary.
- e. Culverts and/or low water crossings are installed as necessary along the existing access road.
- f. The new access road was centerline flagged at the time of staking.
- g. The need for surfacing material during drilling will not be required.
- h. No cattle guards will be necessary.
- i. Surface disturbance and vehicular travel will be limited to the approved location and approved access route. Any additional area needed will be approved by the Field Manager in advance.
- j. If at any time the facilities located on public lands authorized by the terms of the lease are no longer included in the lease (due to a contraction in the unit or other lease or unit boundary change) the BLM will process a change in authorization to the appropriate statute. The authorization will be subject to appropriate rental, or other financial obligations determined by the authorized officer.
- k. Only the new access road will be rehabilitated if the well is not productive. The existing roads are currently in use to access other producing wells.



3. **LOCATION OF EXISTING WELLS WITHIN A 1-MILE RADIUS OF THE PROPOSED LOCATION.**
SEE MAP "C"

- a. Water wells - none
- b. Injection wells -one
- c. Producing wells - fifteen
- d. Drilling wells - none

4. **LOCATION OF TANK BATTERIES AND PRODUCTION FACILITIES.**

- a. Only the wellhead and line heater will be located at the well site. The remainder of the location will be reclaimed. See production facility layout attached. All other facilities will be located at the B-610 McCracken location. These facilities would be modified to accommodate the A-610 production and a revised facility layout will be submitted at a later date.
- b. All permanent structures (onsite for six months or longer) constructed or installed (including oil well pump jacks) will be painted a flat, nonreflective color to match the standard environmental colors, as determined by the Rocky Mountain Five-State Interagency Committee. All facilities will be painted within six months of installation. Facilities required to comply with the Occupational Safety and Health Act (OSHA) may be excluded. Colors will match the soil or rocks in the area.
- c. All site security guidelines identified in 43 CFR 3162.7-5 and Onshore Oil and Gas Order No. 3 shall be followed:
- d. If a gas meter run is constructed, it will be located within 500 feet of the wellhead. The gas flowline will be buried from the wellhead to the meter and will be buried downstream of the meter until it leaves the pad. Meter runs will be housed and/or fenced. The gas meter shall be calibrated prior to first sales and shall be calibrated quarterly thereafter. All gas production and measurement shall comply with the provision of 43 CFR 3162.7-3, Onshore Order No. 5 and American Gas Association (AGA) Report No. 3.
- e. The tank battery will be surrounded by a berm of sufficient capacity to contain 1-1/2 times the storage capacity of the largest tank. All loading lines and valves will be placed inside the



berm surrounding the tank battery. All oil production and measurement shall conform to the provisions of 43 CFR 3162.7-3 and Onshore Oil and Gas Order No. 4.

- f. Production facilities on location may include a lined or unlined produced water pit as specified in Onshore Order No. 7. If water is produced from the well, an Onshore Order No. 7 application must be submitted.
- g. Any necessary pits will be properly fenced to prevent any wildlife entry.
- h. All off-lease storage, off-lease measurement, or commingling on-lease or off-lease will have prior written approval from the Authorized Officer.
- i. All access roads will be maintained as necessary to prevent erosion and accommodate year-round traffic.
- j. The road will be maintained in a safe useable condition.

5. LOCATION AND TYPE OF WATER SUPPLY

- a. All water needed for drilling purposes will be obtained from produced water at the Lisbon Plant.
- b. Water will be hauled to location over the roads marked on Maps A and B.
- c. No water well is to be drilled on this lease.

6. SOURCE OF CONSTRUCTION MATERIAL

- a. Pad construction material will be native (that found in the well pad).
- b. Native material found in the pad may also be used for road upgrading.
- c. The use of materials under BLM jurisdiction will conform with 43 CFR 3610.2-3.
- d. No construction materials will be removed from Federal land.



7. METHODS OF HANDLING WASTE DISPOSAL

- a. All fluids contained within the reserve pit will be allowed to evaporate and the pit will be backfilled.
- b. Burning will not be allowed. All trash will be contained in a trash cage and its contents removed at the end of drilling operations and hauled to an approved disposal sight. Trash will be hauled as necessary, but not later than at the completion of drilling operations.
- c. Any salts and/or chemicals which are an integral part of the drilling system will be disposed of in the same manner as the drilling fluid.
- d. Sewage will be placed in a portable chemical toilet or holding tank and disposed of in accordance with state and county regulations.
- e. The produced fluids (other than water) will be produced into a test tank until such time as construction of production facilities is completed. Any spills of oil, gas salt water or other produced fluids will be cleaned up and removed.

8. ANCILLARY FACILITIES

There are no airstrips, camps, or other facilities planned during the drilling of the proposed well.

9. WELL SITE LAYOUT

- a. See location layout for orientation of rig, cross section of drill pad and cuts and fills.
- b. All wells, whether drilling, producing, suspended, or abandoned, will be identified in accordance with 43 CFR 3162.6
- c. The location of mud tanks; reserve pit, trash cage; pipe racks; living facilities and soil stockpiles will be shown on the Location Layout.
- d. A flare pit will be located a minimum of 30' from the edge of the reserve pit. See location layout attached.



- e. Any pits containing fluid will be fenced to prevent wildlife entry.

10. PLANS FOR RESTORATION OF SURFACE

- a. Six inches of topsoil (or the maximum available) will be salvaged during construction and reserved for use in reclamation.
- b. Immediately upon completion of drilling, all equipment that is not necessary for production shall be removed.
- c. The cuttings pit will be allowed to dry and will then be backfilled.
- d. Immediately upon well completion, the location and surrounding area will be cleared of all unused tubing, equipment, debris, materials, trash and junk not required for production.
- e. Seeding will be done in the fall as required by the BLM. The suggested seed mixture is as follows:

<i>Species</i>	<i>#'s PLS/Acre</i>
Crested wheatgrass	4
Four-wing saltbush	4
Alfalfa	1

- f. The abandonment marker will be at least four feet above ground level and will be inscribed with the following: operator name, lease number, well name and surveyed description (township, range, section and either quarter-quarter or footages).
- g. At such time as the well is plugged and abandoned, the operator shall submit a subsequent report of abandonment.

11. SURFACE OWNERSHIP

Access Roads - All roads are County maintained or are located on lands managed by the BLM.

Well pad - The well pad is located on lands managed by the BLM.



12. OTHER INFORMATION

- a. A Class III archeological survey has been conducted by Four Corners Archeological. No significant cultural resources were found and clearance has been recommended. A copy of this report is attached.
- b. The operator is responsible for informing all persons in the areas who are associated with this project that they will be subject to prosecution for knowingly disturbing historic or archaeological sites, or for collecting artifacts. If historic or archaeological materials are uncovered during construction, the operator is to immediately stop work that might further disturb such materials, and contact the authorized officer (AO). Within five working days the AO will inform the operator as to:

-whether the materials appear eligible for the National Register of Historic Places;

-the mitigation measures the operator will likely have to undertake before the site can be used (assuming in situ preservation is not necessary); and

-a time frame for the AO to complete and expedited review under 36 CFR 800.11 to confirm, through the State Historic Preservation Officer, that the findings of the AO are correct and that mitigation is appropriate.

If the operator wishes, at any time, to relocate activities to avoid the expense of mitigation and/or the delays associated with this process, the AO will assume responsibility for whatever recordation and stabilization of the exposed materials may be required. Otherwise, the operator will be responsible for mitigation costs. The AO will provide technical and procedural guidelines for the conduct of mitigation. Upon verification from the AO that required mitigation has been completed, the operator will then be allowed to resume construction.

- c. All lease and/or unit operations will be conducted in such a manner that full compliance is made with all applicable laws, regulations, Onshore Oil and Gas Orders, the approved plan of operations, and any applicable Notice to Lessees. The operator is fully responsible for the actions of his subcontractors. A copy of these conditions will be furnished the field representative to insure compliance.
- d. A complete copy of the approved APD shall be on location during construction of the location and drilling activities.



- e. There will be no deviation from the proposed drilling and/or work over program without prior approval from the AO. Safe drilling and operating practices must be observed. All wells, whether drilling, producing, suspended, or abandoned will be identified in accordance with 43 CFR 3162.h.
- f. "Sundry Notice and Report on Wells" (From 3160-5) will be filed for approval for all changes of plans and other operations in accordance with 43 CFR 3162.3-2.
- g. This permit will be valid for a period of one year from the date of approval. An extension period may be granted, if requested, prior to the expiration of the original approval period.
- h. The operator or his contractor shall contact the BLM Offices at 435/259-6111 48 hours prior to construction activities.

13. LESSEE'S OR OPERATOR'S REPRESENTATIVE AND CERTIFICATIONPermit Matters**PERMITCO INC.**

Lisa L. Smith
14421 County Road #10
Ft. Lupton, CO 80621
303/857-9999 (Office)
303/857-0577 (Fax)

Drilling & Completion Matters**TOM BROWN, INC.**

555-17th Street, Suite 1850
Denver, CO 80202
Dave Petrie - Regulatory
303/260-5000 (Office)
303/260-5007 (Fax)
303/ 205-9896 (Home) Greg Olson
303/324-9391 (Cell)

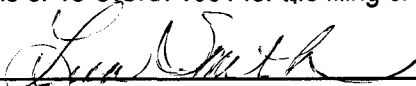
CERTIFICATION

I hereby certify that I, or persons under my direct supervision, have inspected the proposed drill site and access route; that I am familiar with the conditions which currently exist; that the statements made in this plan are, to the best of my knowledge, true and correct; and that the work associated with the operations proposed herein will be performed by Tom Brown, Inc. and their contractors and subcontractors in conformity with this plan and the terms and conditions under which it is approved.

This statement is subject to the provisions of 18 U.S.C. 1001 for the filing of a false statement.

June 18, 2001

Date:

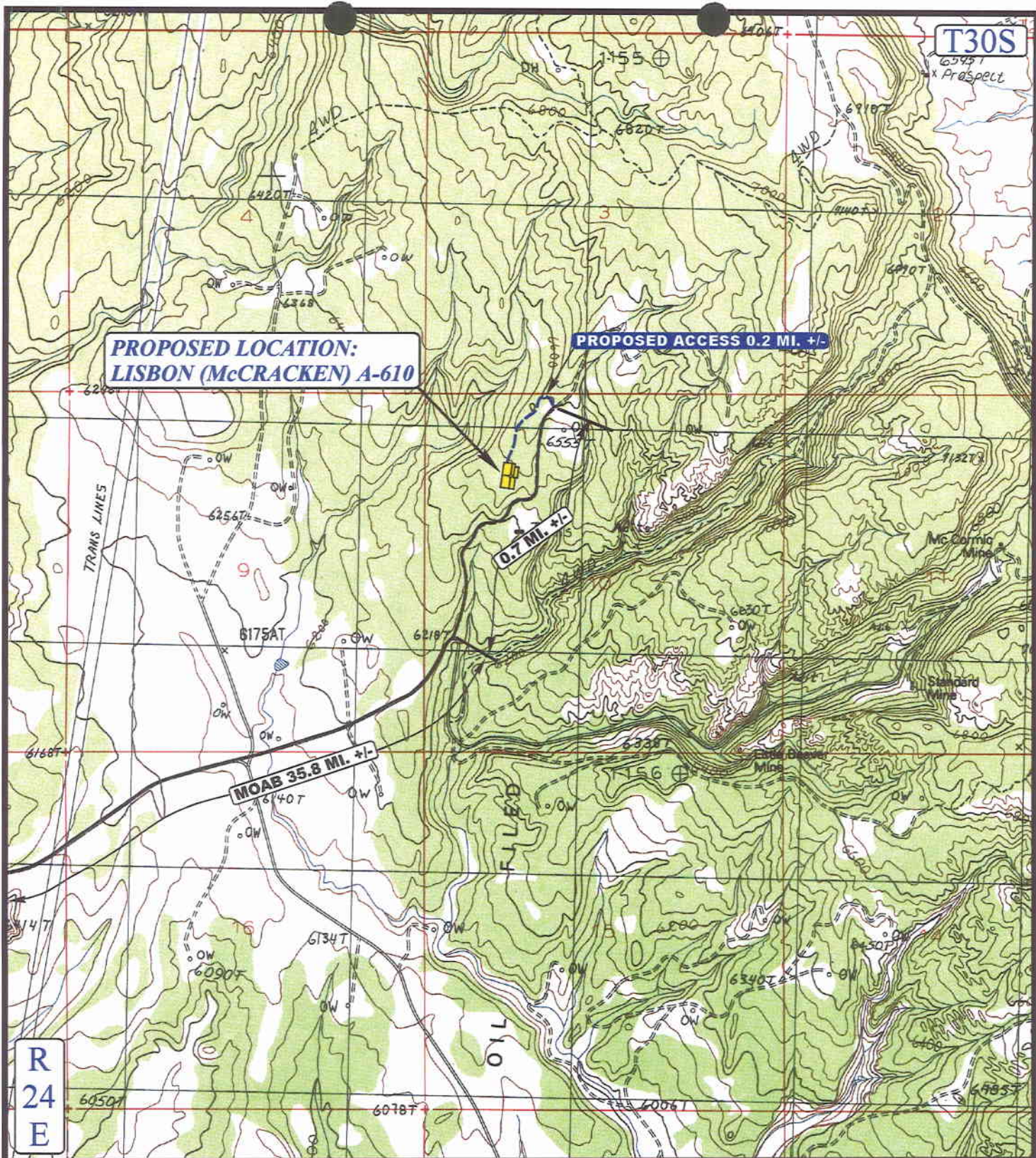


Lisa L. Smith - PERMITCO INC.

Authorized Agent for:

Tom Brown, Inc.





LEGEND:

----- PROPOSED ACCESS ROAD
 _____ EXISTING ROAD



TOM BROWN, INC.

LISBON (McCRACKEN) A-610
 SECTION 10, T30S, R24E, S.L.B.&M.
 1221' FNL 1260' FWL



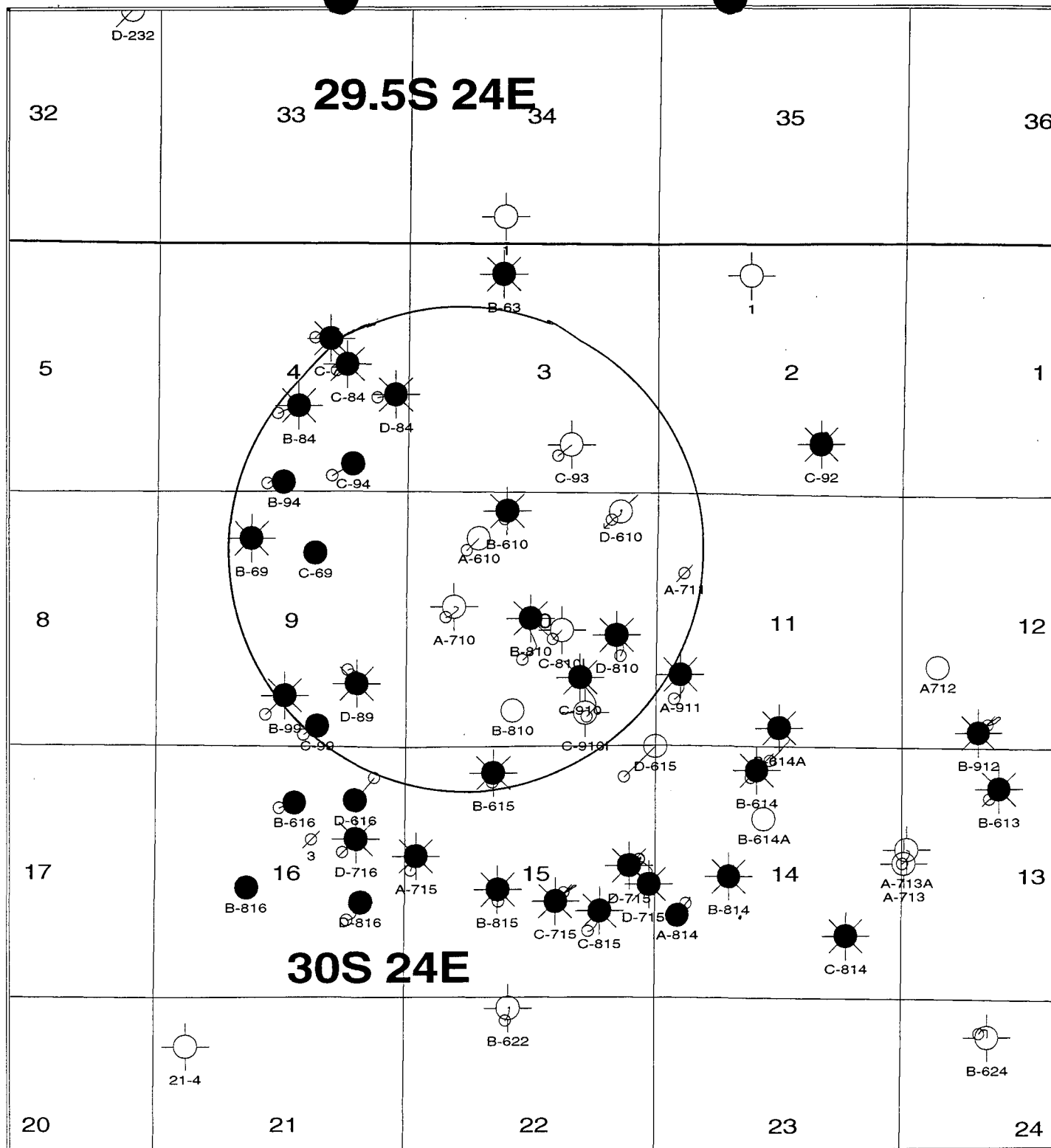
Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

TOPOGRAPHIC
 MAP

3 6 01
 MONTH DAY YEAR

SCALE: 1" = 2000' DRAWN BY: K.G. REVISED: 3-16-01



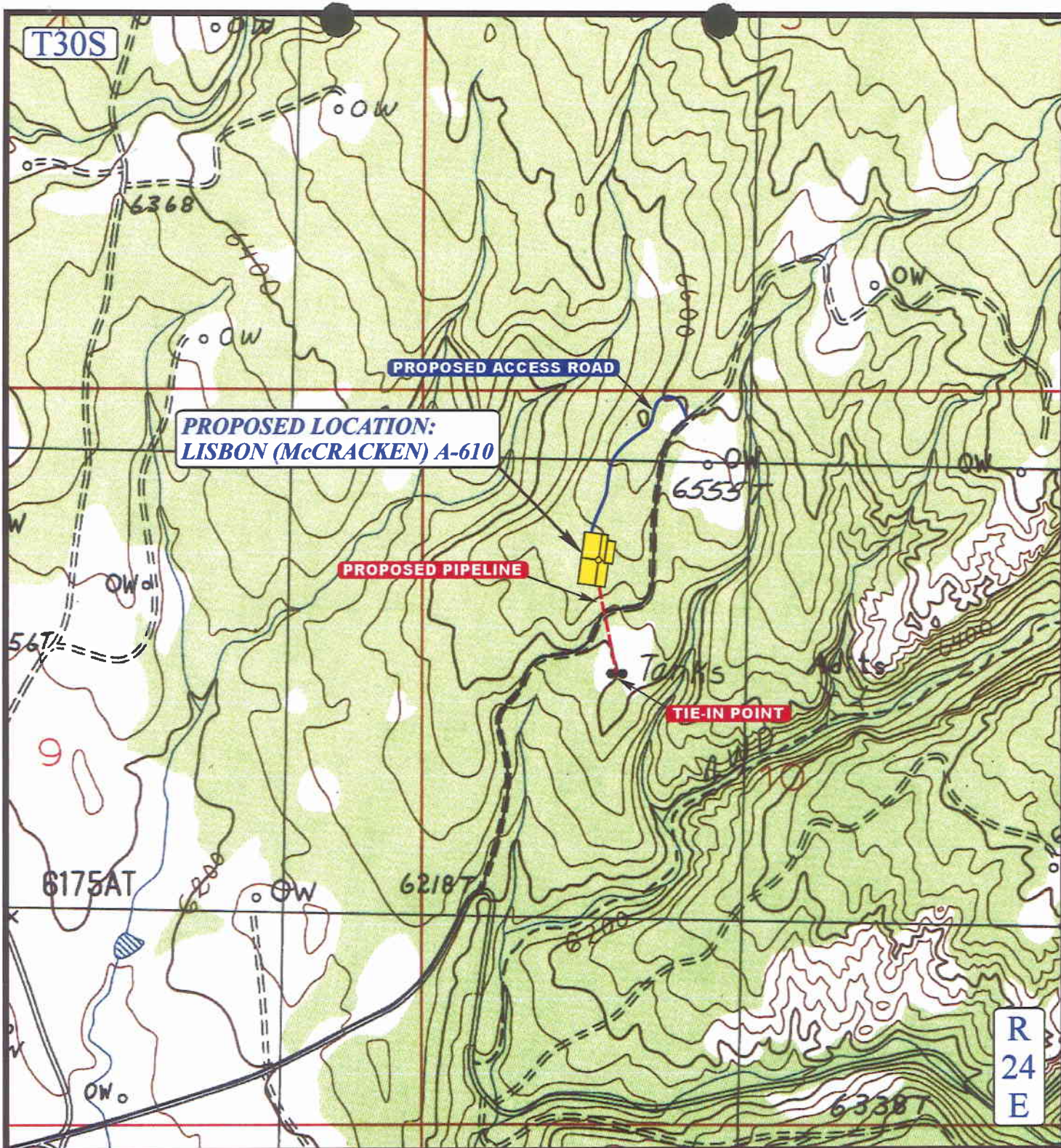


MAP C

Tom Brown, Inc.

Paradox Basin
Lisbon Field, A-610
San Juan County, Utah

Scale 1:36000.



APPROXIMATE TOTAL PIPELINE DISTANCE = 550' +/-

LEGEND:

- EXISTING PIPELINE
- - - PROPOSED PIPELINE
- PROPOSED ACCESS



TOM BROWN, INC.

LISBON (McCRACKEN) A-610
SECTION 10, T30S, R24E, S.L.B.&M.
1221' FNL 1260' FWL



Uintah Engineering & Land Surveying
 85 South 200 East Vernal, Utah 84078
 (435) 789-1017 * FAX (435) 789-1813

**TOPOGRAPHIC
MAP**

3 6 01
 MONTH DAY YEAR

SCALE: 1" = 1000' DRAWN BY: K.G. REVISED: 00-00-00

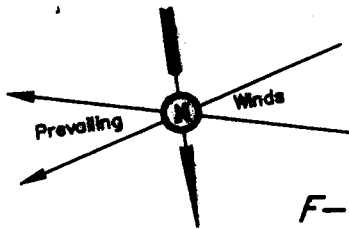


TOM BROWN, INC.

LOCATION LAYOUT FOR

LISBON (McCRACKEN) A-610
SECTION 10, T30S, R24E, S.L.B.&M.

1221' FNL 1260' FWL



SCALE: 1" = 50'

DATE: 03-02-01

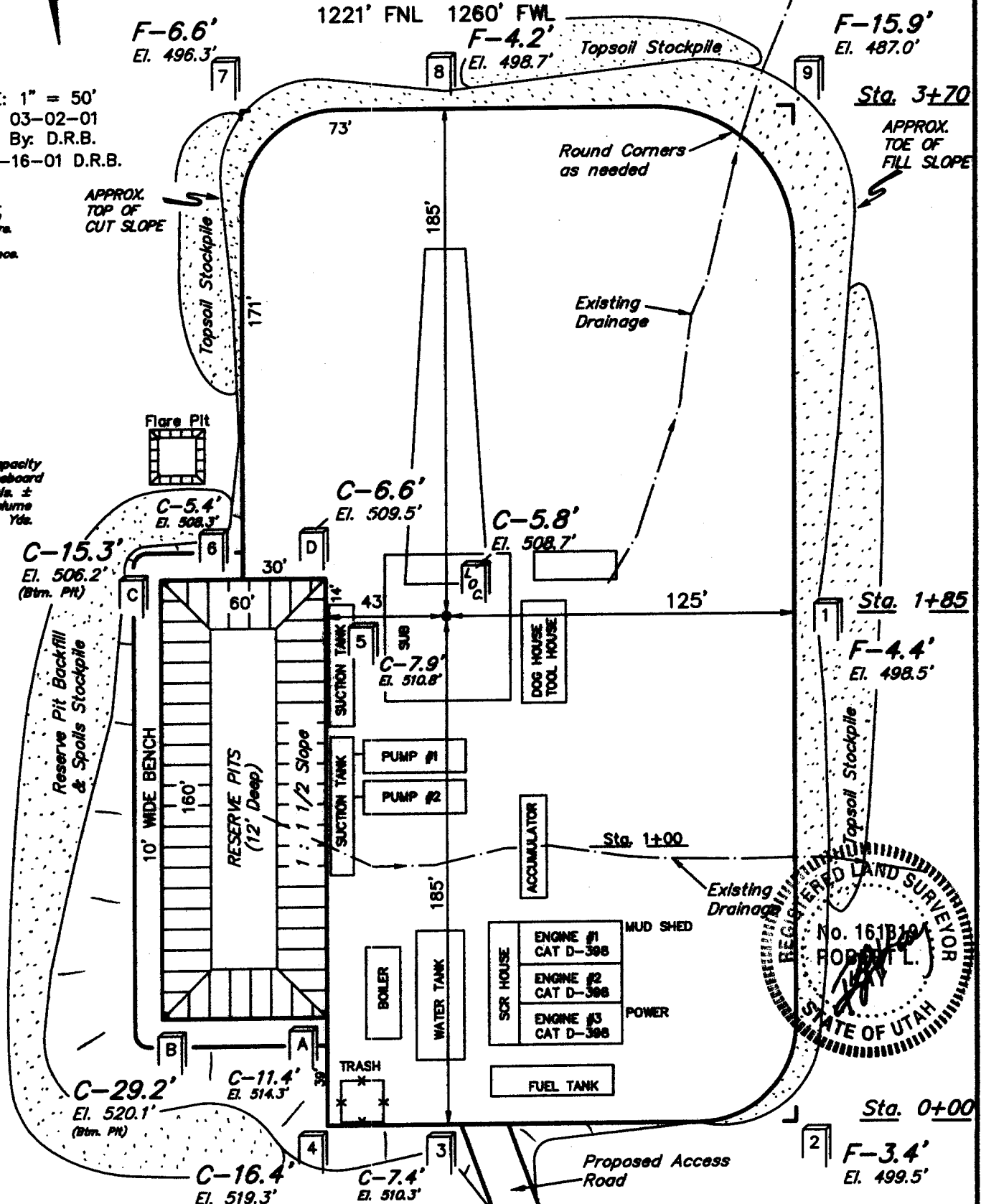
Drawn By: D.R.B.

Rev.: 03-16-01 D.R.B.

FLARE PIT

Mn. 100' from
rty substructure.
Mn. 30' from
reserve pit fence.

Total Pit Capacity
W/2' of Freeboard
= 9,790 Bbls. ±
Total Pit Volume
= 2,700 Cu. Yds.



Elev. Ungraded Ground at Location Stake = 6508.7'

Elev. Graded Ground at Location Stake = 6502.9'

UINTAH ENGINEERING & LAND SURVEYING

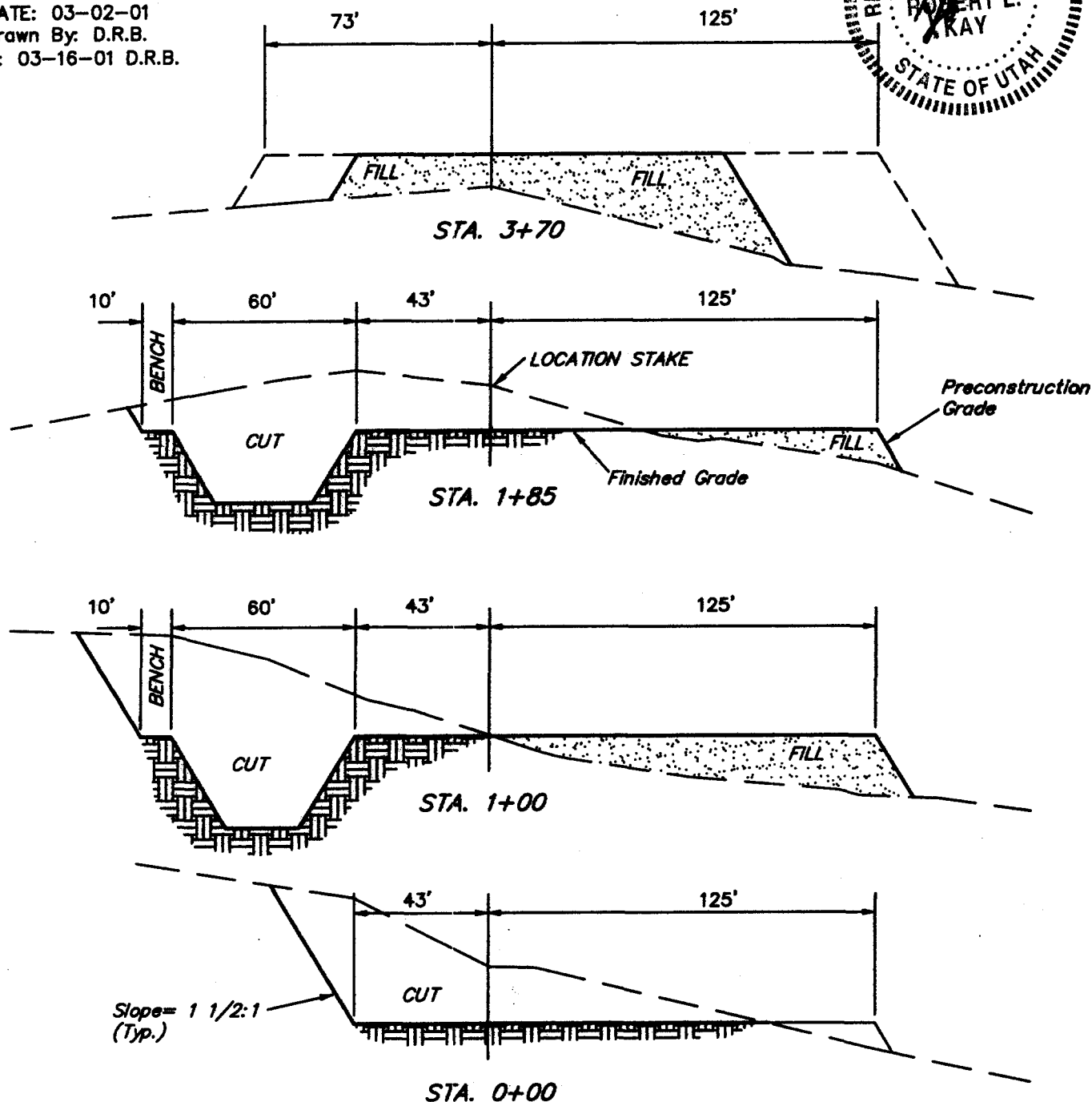
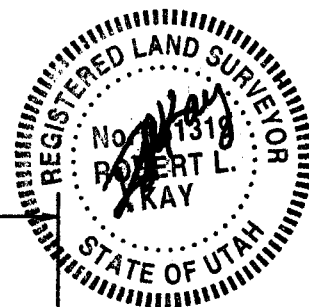
85 So. 200 East • Vernal, Utah 84078 • (435) 788-1017

TOM BROWN, INC.

TYPICAL CROSS SECTION FOR LISBON (McCRACKEN) A-610 SECTION 10, T30S, R24E, S.L.B.&M. 1221' FNL 1260' FWL

1" = 20'
X-Section
Scale
1" = 50'

DATE: 03-02-01
Drawn By: D.R.B.
Rev.: 03-16-01 D.R.B.



APPROXIMATE YARDAGES

CUT	
(6") Topsoil Stripping	= 1,470 Cu. Yds.
Remaining Location	= 11,210 Cu. Yds.
TOTAL CUT	= 12,680 CU.YDS.
FILL	= 9,370 CU.YDS.

EXCESS MATERIAL AFTER
5% COMPACTION = 2,820 Cu. Yds.

Topsoil & Pit Backfill
(1/2 Pit Vol.) = 2,820 Cu. Yds.

EXCESS UNBALANCE
(After Rehabilitation) = 0 Cu. Yds.

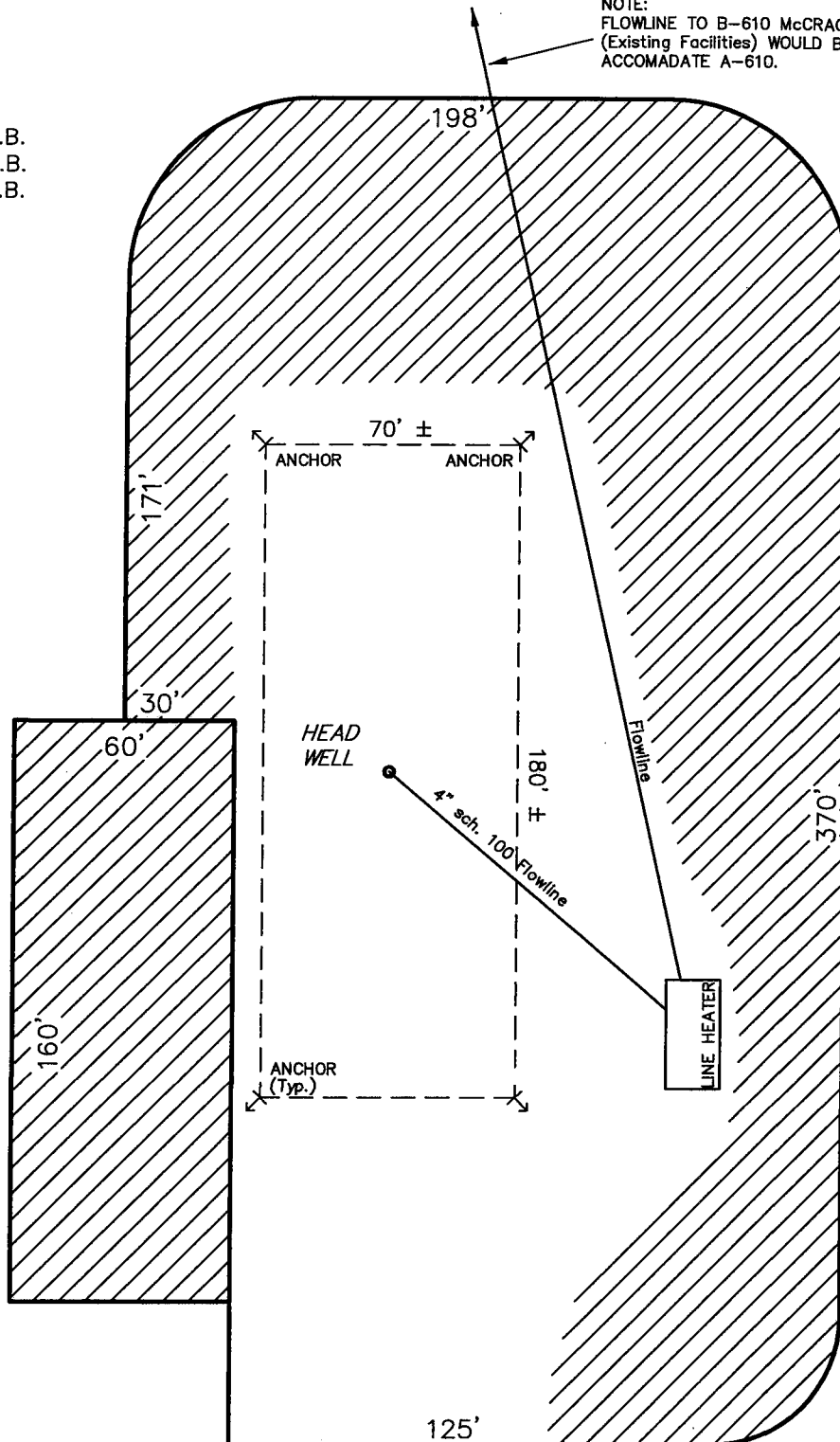
UINTAH ENGINEERING & LAND SURVEYING
85 So. 200 East • Vernal, Utah 84078 • (435) 789-1077



TOM BROWN, INC.
PRODUCTION FACILITIES LAYOUT FOR
LISBON (McCRACKEN) A-610
SECTION 10, T30S, R24E, S.L.B.&M.
1221' FNL 1260' FWL

SCALE: 1" = 50'
DATE: 03-02-01
Drawn By: D.R.B.
Rev.: 03-16-01 D.R.B.
Rev.: 04-04-01 D.R.B.
Rev.: 04-10-01 D.R.B.

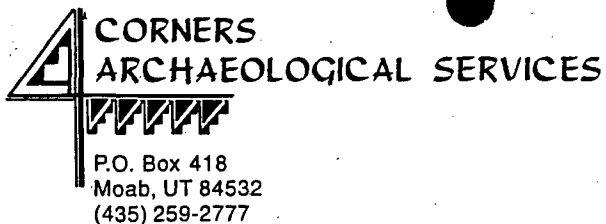
NOTE:
FLOWLINE TO B-610 McCRACKEN LOCATION
(Existing Facilities) WOULD BE MODIFIED TO
ACCOMADATE A-610.



 = REHAB AREA

There are no federal stipulations at this time.





Mr. Bruce Louthan, Archaeologist
Bureau of Land Management
Moab Field Office
82 E. Dogwood Avenue
Moab, Utah 84532

April 5, 2001

Dear Bruce,

Enclosed please find two copies of our archaeological survey report for Tom Brown Inc. Company's proposed Lisbon McCracken #A-710 and Lisbon #D-615 Well Locations, Pipelines, and Access Route, located in San Juan County, Utah. The project is located in the Lisbon Oil Field on lands administered by Utah's Bureau of Land Management. A total of 31.0 acres were inventoried for cultural resources. Because the project, in part, includes management areas designated under BLM's Monticello Field Office, copies of this report will also be distributed to the Area Archaeologist -Dale Davidson.

No cultural resources were found in the project area and archaeological clearance is the recommended procedure.

Sincerely,

Carol S. DeFrancia
Principal Investigator

CSD/distribution:

Mr. Dave Petrie, Tom Brown Inc., Denver
Ms. Lisa Smith, Permitco Inc., Ft. Lupton
Mr. Dale Davidson, Archaeology, BLM Monticello
Mr. Jeff Brown, Oil & Gas, BLM Monticello

ARCHAEOLOGICAL SURVEY OF
TOM BROWN INC. COMPANY'S PROPOSED
LISBON McCRACKEN #A-710 & LISBON #D-615
WELL LOCATIONS, PIPELINES AND ACCESS ROUTE
SAN JUAN COUNTY, UTAH

4-CAS REPORT 2111

by
Carol S. DeFrancia

4-CORNERS ARCHAEOLOGICAL SERVICES
76 S. Main Street
Moab, Utah 84532
(435) 259-2777

April 5, 2001

FEDERAL ANTIQUITIES PERMIT 00UT62712
Utah State Permit No. U01-FE-0070b

Prepared For:
Tom Brown Inc.
555 17th St., Suite 1850
Denver, CO 80202

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ABSTRACT

The archaeological survey of Tom Brown Inc. Company's proposed Lisbon McCracken #A-710 and Lisbon #D-615 well locations, pipeline routes, and one access route was conducted by personnel of 4-Corners Archaeological Services between March 5, and April 4, 2001. The project is located in the Lisbon Oil Field in San Juan County, Utah, approximately ten miles southeast of La Sal Junction. A total of 31.0 acres were inventoried for cultural resources.

No cultural resources were found in the project area and archaeological clearance is the recommended procedure.

INTRODUCTION

The archaeological survey of Tom Brown Inc. Company's proposed Lisbon McCracken #A-710 and Lisbon #D-615 well locations, pipeline routes, and one access route was conducted by Carol DeFrancia of 4-Corners Archaeological Services between March 5, and April 4, 2001. The project is located in the Lisbon Oil Field along an upland plateau region between Dry Valley and Big Indian Valley (Figure 1) on lands administered by the Utah Bureau of Land Management. BLM land status designations of the project area include two separate agency areas (Monticello Field Office and Moab Field Office), however, the entire project will be administered by the BLM's Moab Field Office. The survey was requested by Ms. Lisa L. Smith of Permitco Inc. Personnel of Uintah Engineering & Land Surveying staked and flagged the well locations and access route. Both proposed locations are accessed by existing well service roads. The Lisbon McCracken #A-710 well location also includes a newly proposed access route that extends approximately 1500' north and east of the well location to the existing well service road. The proposed pipeline route extends east and south of the #A-710 well pad for ca. 550' to the existing #B-610 tank battery. The Lisbon #D-615 pipeline route extends ca. 1200' northwest to the existing #C-910 well location. A total of 10.0 acres (each) were inventoried for cultural resources on both well locations, and an additional 7.4 acres were surveyed for the proposed access route and two pipeline routes (Figure 2).

Principal federal legislation that is designed to conserve and protect cultural resources includes the Antiquities Act of 1906 (PL 52-209), the National Historic Preservation Act of 1966 (PL 89-665), the National Environmental Policy Act of 1969 (PL 91-90), the 1971 Executive Order No. 11593, the Archeological and Historical Conservation Act of 1974 (PL 93-291), and the Archaeological Resource Protection Act (ARPA) of 1978 (PL 95-96).

No cultural resources were found in the project area and archaeological clearance is the recommended procedure.

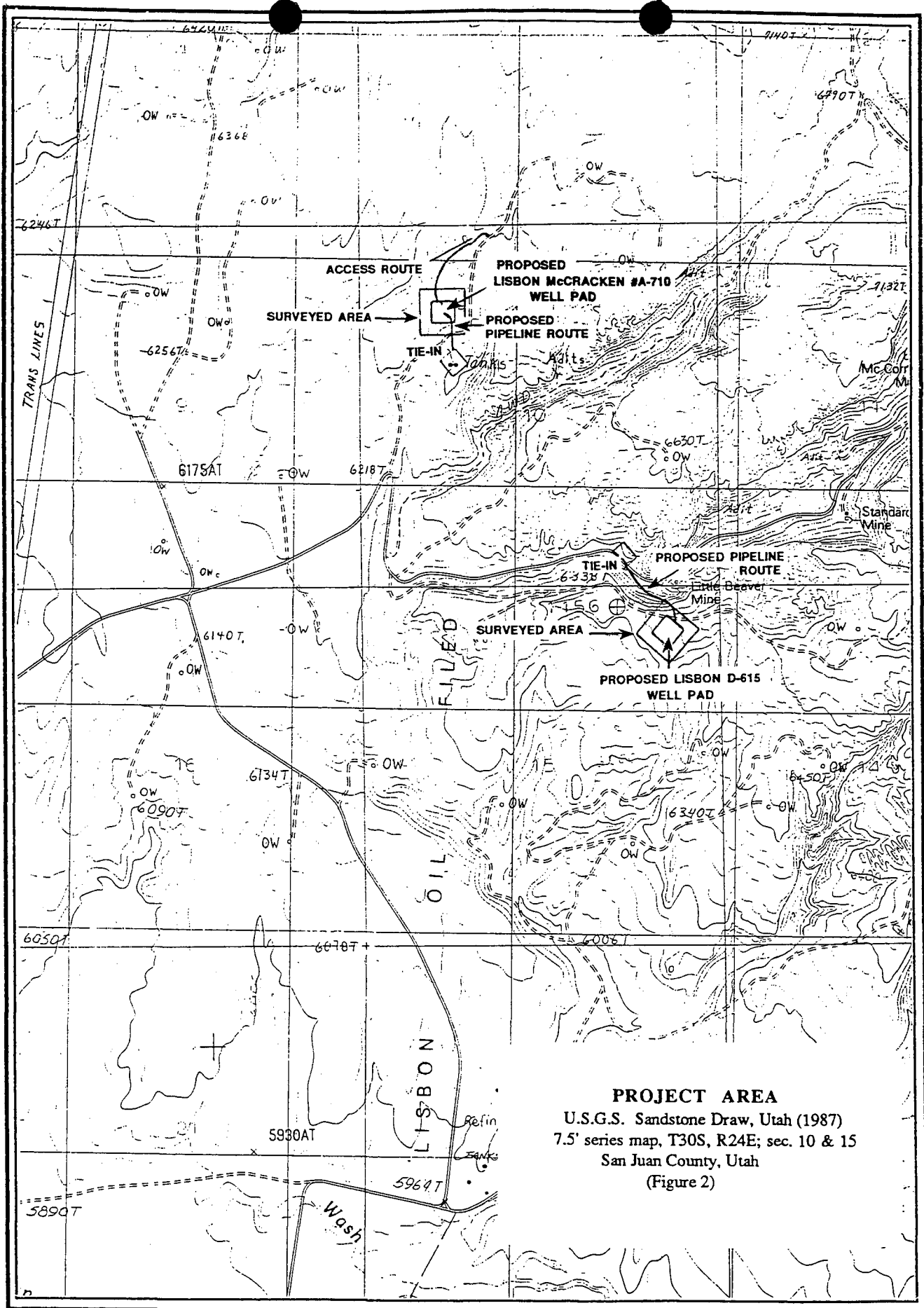
PROJECT AREA

Map Reference: Sandstone Draw, Utah 1987 (7.5' series)

Total Project Area: 4.9 acres; area surveyed 31.0 acres

Lisbon McCracken #A-710 well:

Legal Description: T30S, R24E: SE, NW, NW of section 10



PROJECT AREA
 U.S.G.S. Sandstone Draw, Utah (1987)
 7.5' series map, T30S, R24E; sec. 10 & 15
 San Juan County, Utah
 (Figure 2)

Lisbon McCracken #A-710 well:

Center Stake: 1221' FNL, 1260' FWL; section 10

UTM Coordinates*: (*all in zone 12)		Easting	Northing
	NW Corner	650560	4228870
	NE Corner	650760	4228870
	SE Corner	650760	4228660
	SW Corner	650560	4228660

Project Area: 370 x 230' (1.9 acres)

Surveyed Area: 660 x 660' (10 acres)

Results: No cultural resources found

Lisbon McCracken #A-710 pipeline route:

Legal Description: T30S, R24E: NW/NW & SE/NW of section 10

UTM Coordinates*: (*all in zone 12)		Easting	Northing
	N end	650680	4228860
	bend	650700	4228740
	S end	650720	4228600 (tie-in)

Project Area: 550' long, maximum 16' wide (.20 acres)

Surveyed Area: 550' x 150' (1.8 acres)

Results: No cultural resources found

Well pad access route:

Legal Description: T30S, R24E: NW/NW & NE/NW of section 10

UTM Coordinates*: (*all in zone 12)		Easting	Northing
	S end	650640	4228820
	bend	650640	4228900
	bend	650680	4229000
	bend	650800	4229080
	NE end	650880	4229120

Project Area: 1500' long, maximum 16' wide (.55 acres)

Surveyed Area: 1500' x 150' (5.1 acres)

Results: No cultural resources found

Lisbon #D-615 well:

Legal Description: T30S, R24E: NW, NE, NE of section 15

Lisbon #D-615 well:

Center Stake: 633' FNL, 741' FEL; section 15

UTM Coordinates*: (*all in zone 12)		Easting	Northing
	NW Corner	651680	4227500
	NE Corner	651820	4227370
	SE Corner	651700	4227220
	SW Corner	651540	4227350

Project Area: 370 x 230' (1.9 acres)

Surveyed Area: 660 x 660' (10 acres)

Results: No cultural resources found

Lisbon #D-615 pipeline route:

Legal Description: T30S, R24E: NE 1/4 of sec. 15
SE 1/4 of sec. 10

UTM Coordinates*: (*all in zone 12)		Easting	Northing
	SE end	651720	4227400
	bend	651580	4227580
	NE end	651490	4227660 (tie-in)

Project Area: 1200' long, maximum 16' wide (acres)

Surveyed Area: 1200' x 150' (5.1 acres)

Results: No cultural resources found

PHYSIOGRAPHY AND ENVIRONMENT

The project area is located in the Lisbon Oil Field in San Juan County, Utah, approximately ten miles southeast of the community of La Sal Junction. The project is situated along an upland plateau region between Dry Valley and Big Indian Valley within the Colorado Plateau physiographic province. More specifically, the area is a structural element of the Hatch Syncline Section of the Paradox Basin (Stokes 1977). The proposed Lisbon McCracken #A-710 well location occupies a southwest-facing slope along an elevated ridgeline that contains a series of upward slanting bedrock exposures. The proposed Lisbon #D-615 also occupies an elevated ridgeline along a west-southwestern aspect slope. Sediments in both areas consists of shallow pockets of residual and aeolian sand deposits on top of extensive bedrock exposures. There is little apparent depth at either location.

Vegetation along the ridgelines is a pinyon-juniper woodland that includes an understory of cliffrose, mountain mahogany, ephedra, cedarweed, broad leaf yucca, rabbitbrush, snakeweed, Indian ricegrass and bunchgrass. Seasonal water sources are found in isolated springs in both Dry Valley and Big Indian Valley.

Reptilian, avian, and mammalian associations are consistent with those of the Upper Sonoran Life Zone throughout the Colorado Plateau.

PREVIOUS RESEARCH

A file search was conducted on March 2, 2001 at the BLM Moab and Monticello Field Offices, and with the Utah State Historical Society, Division of State History, Salt Lake. The results of the review indicated that a small number of oil and gas related surveys (Billat 1992; Fuller 1992; Hibbets 1987; and Weder 1989) have been conducted in the vicinity during the late 1980's and early 1990's, and that only a few archaeological sites are documented within one to three miles from the project area. Less than ten miles north of the project area an extensive 3D seismic survey was conducted in 1995 (4-CAS #9520) and revealed numerous middle to late period Archaic sites, extensive lithic quarries, and a protohistoric Ute wickiup campsite. Additionally, an extensive Utah BLM initiated cultural resource study tract was conducted a few miles east of the project area in 1981 (Black et al.). This survey included about ten percent of the Lisbon Oil and Gas Area (due east of the project area) and provides general information on the areas' prehistory. The majority of site types found in the Lisbon Valley Study Tract included open lithic scatters affiliated with the Archaic occupation, and to a lesser extent, evidence of Anasazi, Ute/Paiute, Navajo, and Euro-American occupation. Isolated finds of late Paleo-Indian were also reported from the survey.

EXAMINATION PROCEDURES

Prior to the field investigations the well pads, pipelines, and access route were staked and flagged. A 660 x 660' area surrounding the wells center stakes (10 acres each) were inventoried by walking a series of parallel transects spaced 15m apart. Two parallel zig-zag transects were walked along the pipeline routes (5.9 acres), covering a 150' wide corridor. This effectively gives a minimal 60' buffer on either side of the pipeline routes. A 100' wide corridor was also walked along the proposed access route (5.1 acres)

SURVEY RESULTS

No cultural resources were found in the project area.

CONCLUSION AND RECOMMENDATIONS

The archaeological survey of Tom Brown Inc. Company's proposed Lisbon McCracken #A-710 and Lisbon #D-615 well locations, pipeline routes, and one access route was conducted by personnel of 4-Corners Archaeological Services between March 5, and April 4, 2001. The project is located in the Lisbon Oil Field along an upland plateau region between Dry Valley and Big Indian Valley in San Juan County, Utah, approximately ten miles southeast of La Sal Junction. A total of 31.0 acres were inventoried for cultural resources.

No cultural resources were found in the project area and no further management recommendations are necessary.

REFERENCES

- Billat, Lorna B. and Scott E
1992 An Archeological Survey of Four Seismic Corridors; Lines WC-1, WC-2, BC-1, and LS-3, Between La Sal and Lisbon Valley, San Juan County, Utah. Report #U-92-BC-0165b, s.p. Manuscript on file at BLM, Moab.
- Black, Kevin D., James M. Copeland, and Steven M. Horvath
1981 An Archaeological Survey of the Central Lisbon Valley Study Tract in the Moab District, San Juan County, Utah. Cultural Resource Series No. 13, Moab.
- DeFrancia, Carol S.
1996 Archaeological Survey Report for Ampolex (USA) Inc. Company's Wilson Canyon 3D Seismic Program Near La Sal Junction, San Juan County, Utah. 4-CAS Report No. 9520, Moab.
- Fuller, Steven
1992 Archeological Survey of Union Oil of California's Lisbon C-801i Well Pad, San Juan County, Utah. LAC Report No. 9261 (U92-LA-600b). Manuscript on file at BLM, Moab.
- Hibbets, Barry N.
1987 An Archaeological Survey of Union Oil of California's Lisbon Unit C-9 & 10 Well Site, Access Road, Pipeline & Tank Battery, San Juan County, Utah. LAC Report No. 8756 (U87-LA-206b). Manuscript on file at BLM, Moab.
- Stokes, William Lee
1987 Geology of Utah. Occasional Paper Number 6. Utah Museum of Natural History, University of Utah, Salt Lake City.
- Weder, Dennis G.
1989 Cultural Resource Evaluation of Two Seismic Lines in the Lisbon Oil Field Locality of San Juan County, Utah. (U89-AF-167b,s.) Manuscript on file at BLM, Moab.



TOM BROWN, INC.

April 4, 2001

**Bureau of Land Management
Moab Field Office
82 E. Dogwood
Moab, Utah 84532**

Attn: Minerals

**Re: Lisbon A-610
Sec 10, T30S, R24E
San Juan County, Utah**

Gentlemen:

This letter is to inform you that Permitco Inc. is authorized to act as Agent and to sign documents on behalf of Tom Brown, Inc. when necessary for filing county, state and federal permits including Onshore Order No. 1, Right of Way applications, etc., for the above mentioned well.

It should be understood that Permitco is acting as Agent only in those matters stated above and is not responsible for drilling, completion, production or compliance with regulations.

Tom Brown, Inc. agrees to accept full responsibility for operations conducted in order to drill, complete and produce the above-mentioned well.

Sincerely,

**Gabriele E. Forrest
Regulatory Analyst**

WORKSHEET
APPLICATION FOR PERMIT TO DRILL

APD RECEIVED: 06/19/2001

API NO. ASSIGNED: 43-037-31821

WELL NAME: LISBON (MCCRACKEN) A-610

OPERATOR: TOM BROWN INC (N9885)

CONTACT: LISA SMITH, AGENT

PHONE NUMBER: 303-857-9999

PROPOSED LOCATION:

NWNW 10 300S 240E

SURFACE: 1221 FNL 1260 FWL

BOTTOM: 1221 FNL 1260 FWL

SAN JUAN

LISBON (385)

LEASE TYPE: 1 - Federal

LEASE NUMBER: UTU-0014903

SURFACE OWNER: 1 - Federal

PROPOSED FORMATION: MCRKN

INSPECT LOCATN BY: / /

Tech Review	Initials	Date
Engineering		
Geology		
Surface		

RECEIVED AND/OR REVIEWED:

☒ Plat

☒ Bond: Fed[1] Ind[] Sta[] Fee[]
(No. ESO-183)

☒ Potash (Y/N)

☒ Oil Shale (Y/N) *190-5 (B) or 190-3

☒ Water Permit
(No. PROD WTR / Lisbon Plant)

☒ RDCC Review (Y/N)
(Date:)

☒ Fee Surf Agreement (Y/N)

LOCATION AND SITING:

R649-2-3. Unit LISBON (MCCRACKEN)

R649-3-2. General

Siting: 460 From Qtr/Qtr & 920' Between Wells

R649-3-3. Exception

☒ Drilling Unit

Board Cause No: 136-3 *Unit & Enh. Rec.

Eff Date: 9-28-89

Siting: *Suspends Gen. Siting

R649-3-11. Directional Drill

COMMENTS:

STIPULATIONS: ① FEDERAL APPROVAL



COUNTY:SAN JUAN UNIT:LISBON (MCCRACKEN
CAUSE: 136-3



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Utah State Office
P.O. Box 45155
Salt Lake City, Utah 84145-0155

IN REPLY REFER TO:
3160
(UT-922)

June 21, 2001

Memorandum

To: Assistant District Manager Minerals, Moab District
From: Michael Coulthard, Petroleum Engineer
Subject: 2001 Plan of Development Lisbon McCracken
Unit San Juan County, Utah.

Pursuant to email between Lisha Cordova, Division of Oil, Gas and Mining, and Mickey Coulthard, Utah State Office, Bureau of Land Management. The following well is planned for calendar year 2001 within the Lisbon McCracken Unit, San Juan County, Utah.

API #	WELL NAME	LOCATION
Lisbon (McCracken)		
43-037-31821 A-610	Sec. 10, T30S, R24E	1221 FNL 1260 FWL

This office has no objection to permitting the well at this time.

/s/ Michael L. Coulthard

bcc: File - Lisbon McCracken Unit
Division of Oil Gas and Mining
Agr. Sec. Chron
Fluid Chron

MCoulthard:mc:6-21-1



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

Michael O. Leavitt
Governor

Kathleen Clarke
Executive Director

Lowell P. Braxton
Division Director

1594 West North Temple, Suite 1210

PO Box 145801

Salt Lake City, Utah 84114-5801

801-538-5340

801-359-3940 (Fax)

801-538-7223 (TDD)

June 21, 2001

Tom Brown, Inc.
555 - 17th St, Suite 1850
Denver, CO 80202

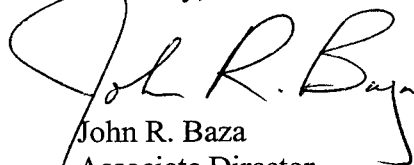
Re: Lisbon (McCracken) A-610 Well, 1221' FNL, 1260' FWL, NW NW, Sec. 10,
T. 30 South, R. 24 East, San Juan County, Utah

Gentlemen:

Pursuant to the provisions and requirements of Utah Code Ann. § 40-6-1 *et seq.*, Utah Administrative Code R649-3-1 *et seq.*, and the attached Conditions of Approval, approval to drill the referenced well is granted.

This approval shall expire one year from the above date unless substantial and continuous operation is underway, or a request for extension is made prior to the expiration date. The API identification number assigned to this well is 43-037-31821.

Sincerely,



John R. Baza
Associate Director

er

Enclosures

cc: San Juan County Assessor
Bureau of Land Management, Moab District Office
Permitco Inc.

Operator: Tom Brown, Inc.

Well Name & Number Lisbon (McCracken) A-610

API Number: 43-037-31821

Lease: UTU 0014903

Location: NW NW **Sec.** 10 **T.** 30 South **R.** 24 East

Conditions of Approval

1. General

Compliance with the requirements of Utah Admin. R. 649-1 *et seq.*, the Oil and Gas Conservation General Rules, and the applicable terms and provisions of the approved Application for permit to drill.

2. Notification Requirements

Notify the Division within 24 hours of spudding the well.

- Contact Carol Daniels at (801) 538-5284.

Notify the Division prior to commencing operations to plug and abandon the well.

- Contact Dan Jarvis at (801) 538-5338

3. Reporting Requirements

All required reports, forms and submittals will be promptly filed with the Division, including but not limited to the Entity Action Form (Form 6), Report of Water Encountered During Drilling (Form 7), Weekly Progress Reports for drilling and completion operations, and Sundry Notices and Reports on Wells requesting approval of change of plans or other operational actions.

4. State approval of this well does not supersede the required federal approval, which must be obtained prior to drilling.



TOM BROWN, INC.

May 15, 2002

Mr. John R. Baza
Associate Director
State of Utah
Department of Natural Resources
Division of Oil, Gas and Mining
P.O. Box 145801
Salt Lake City, Utah 84114-5801

RE: Extension of APD's
Lisbon (McCracken) D-615 Well
API #43-037-31817
NENE Section 15, T30S-R24E
Lisbon (McCracken) A-610 Well
API #43-037-31821
NWNW Section 10, T30S-R24E
San Juan County, Utah

Dear Mr. Baza:

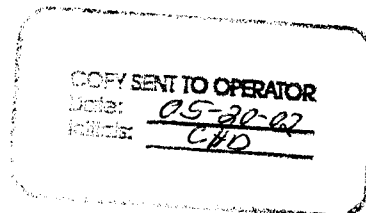
Tom Brown, Inc. requests a one year extension of the state approvals for the above captioned wells.

If additional information is required, please contact me at (303)260-5078.

Sincerely,

Georganne Mitchell
Regulatory Analyst

Approved by the
Utah Division of
Oil, Gas and Mining
Date: 05-20-02
By: Georganne Mitchell



RECEIVED

MAY 17 2002

DIVISION OF
OIL, GAS AND MINING



State of Utah
DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

1594 West North Temple, Suite 1210
PO Box 145801
Salt Lake City, Utah 84114-5801
(801) 538-5340 telephone
(801) 359-3940 fax
(801) 538-7223 TTY
www.nr.utah.gov

Michael O. Leavitt
Governor

Robert L. Morgan
Executive Director

Lowell P. Braxton
Division Director

June 24, 2003

Lisa Smith
Tom Brown Inc.
14421 County Road 10
Fort Lupton, CO 80621

Re: APD Rescinded -Lisbon (McCracken) A-610, Sec. 10, T. 30S, R. 24E
San Juan County, Utah API No. 43-037-31821

Dear Ms. Smith:

The Application for Permit to Drill (APD) for the subject well was approved by the Division of Oil, Gas and Mining (Division) on June 21, 2001. On May 20, 2002 the Division granted a one-year APD extension. No drilling activity at this location has been reported to the division. Therefore, approval to drill the well is hereby rescinded, effective June 24, 2003.

A new APD must be filed with this office for approval prior to the commencement of any future work on the subject location.

If any previously unreported operations have been performed on this well location, it is imperative that you notify the Division immediately.

Sincerely,

Diana Mason
Engineering Technician

cc: Well File
Bureau of Land Management, Moab

**STATE OF UTAH
DIVISION OF OIL, GAS AND MINING**

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill new wells, deepen existing wells, or to reenter plugged and abandoned wells.
Use APPLICATION FOR PERMIT TO DRILL OR DEEPEN form for such proposals.

1. Type of Well

☐ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator: EnCana Oil & Gas (USA) Inc.
(successor in interest of Tom Brown, Inc. effective 1/1/05)

Contact: Jane Washburn
Phone: 720/876-5431

3. Address and Telephone No.

370 Seventeenth Street, Suite 1700, Denver, CO 80202

4. Location of Well

Footages:

SEE ATTACHED LIST OF WELLS

QQ, Sec T,R,M:

5. Lease Designation and Serial No.

6. If Indian, Allotte or Tribe Name

7. Unit Agreement Name

8. Well Name and Number

9. API Well Number

10. Field and Pool, or Exploratory Area

11. CHECK APPROPRIATE BOX(ES) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

NOTICE OF INTENT
(Submit in Duplicate)

- | | |
|--|---|
| <input type="checkbox"/> Abandon | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Repair Casing | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Recomplete |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Reperforate |
| <input type="checkbox"/> Fracture Treat or Acidize | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Multiple Completion | <input type="checkbox"/> Water Shut-Off |
| <input type="checkbox"/> Other | |

Approximate date work will start _____

SUBSEQUENT REPORT
(Submit Original Form Only)

- | | |
|--|---|
| <input type="checkbox"/> Abandon* | <input type="checkbox"/> New Construction |
| <input type="checkbox"/> Repair Casing | <input type="checkbox"/> Pull or Alter Casing |
| <input type="checkbox"/> Change Plans | <input type="checkbox"/> Recomplete |
| <input type="checkbox"/> Convert to Injection | <input type="checkbox"/> Reperforate |
| <input type="checkbox"/> Fracture Treat or Acidize | <input type="checkbox"/> Vent or Flare |
| <input type="checkbox"/> Water Shut-Off | <input type="checkbox"/> Water Shut-Off |
| <input checked="" type="checkbox"/> Other | |

Change of Operator

Date of work completion _____

Report results of Multiple Completions and Recompletions to different reservoirs
on WELL COMPLETION OR RECOMPLETION REPORT AND LOG form.

* Must be accompanied by a cement verification report.

12. Describe Proposed or completed Operation (clearly state all pertinent details, including estimated starting date of any proposed work and approximate duration thereof.

If the proposal is to deepen directionally or recomplete horizontally, give subsurface locations and measured and true vertical depths of all pertinent markers and zones.

Attach the Bond under which the work will be performed or provide the Bond No. on file with the BLM/BIA. Required subsequent reports shall be filed within 30 days following completion of the involved operations. If the operation results in a multiple completion or recompletion in a new interval, A form 3160-4 shall be filed once testing has been completed. Final Abandonment Notices shall be filed only after all requirements, including reclamation, have been completed, and the operator has determined that the site is ready for final inspection.)

N9885

N2175

The merger of Tom Brown, Inc. with EnCana Oil & Gas (USA) Inc. was effective January 1, 2005.

It is, therefore, requested that the Operator of all properties on the attached list be changed from Tom Brown, Inc. to EnCana Oil & Gas (USA) Inc.

RECEIVED

JAN 2 / 2005

DIV. OF OIL, GAS & MINING

13.	
Name (Printed/Typed)	Title
Jane Washburn	Operations Engineering Tech
Signature <i>Jane Washburn</i>	Date
	01/24/2005

(This space for State use only)

APPROVED 2/24/05

ER

Division of Oil, Gas and Mining
Earlene Russell, Engineering Technician

well name	sec	twsp	rng	api	entity	lease	well	stat	flag	unit name	lease num	qtr	qtr	td	md	d	apd	op no
BIG INDIAN 36-42	36	290S	240E	4303731827		State	GW	APD			ST-UT-37067	SESW				5750		N9885
FEDERAL 14-18	18	250S	060E	4301530060	436	Federal	NA	PA			UTU-69447	SWSW						N9885
NW USA D-1 (B-624)	24	300S	240E	4303716516	99990	Federal		A			UTU-070034	NENW						N9885
FEDERAL 15-25	25	290S	230E	4303730317	4776	Federal	GW	S			UTU-986	SWSE						N9885
BIG INDIAN 35-24	35	290S	240E	4303731829	14409	Federal	GW	DRL	C		UTU-077077	SENE						N9885
BIG INDIAN 27-34	27	290S	240E	4303731828		Federal	GW	APD	C		N9885							
BIG INDIAN UNIT 1	33	290S	240E	4303716219	8122	Federal	OW	S		BIG INDIAN	UTSL-067131	SENE						N9885
BIG INDIAN 4	14	300S	250E	4303716221	8124	Federal	GW	TA		BIG INDIAN	UTSL-089097	SWSW						N9885
BIG INDIAN 34-11	34	290S	240E	4303731818	14004	Federal	D	PA	C	BIG INDIAN	UTU-014905	NWNW						N9885
BULL HORN U 10-43	10	300S	250E	4303731831	14393	Federal	GW	DRL	C	BULL HORN	UT-73190	SWSE						N9885
LISBON B-615	15	300S	240E	4303715123	8123	Federal	OW	P		LISBON	UTU-09179	NENW						N9885
LISBON FED 2-21F	21	300S	250E	4303715768	410	Federal	GW	S		LISBON	UTU-094674	SENE						N9885
LISBON B912	12	300S	240E	4303715769	8123	Federal	OW	S		LISBON	UTU-06922	SESW						N9885
LISBON A-713A	13	300S	240E	4303716236	8123	Federal	GW	PA		LISBON	UTSL-070034	SWNW						N9885
LISBON A-715	15	300S	240E	4303716237	8123	Federal		A		LISBON	UTU-020691A	SWNW						N9885
LISBON B-613	13	300S	240E	4303716240	8123	Federal	OW	S		LISBON	UTSL-070034	NENW						N9885
LISBON C-69	09	300S	240E	4303716245	8123	Federal	OW	S		LISBON	UTU-09179	NWNE						N9885
LISBON C-94	04	300S	240E	4303716247	8123	Federal	OW	S		LISBON	UTU-66582	SWSE						N9885
LISBON UNIT D-84	04	300S	240E	4303716250	8123	Federal	OW	P		LISBON	UTU-015445	NESE						N9885
LISBON D-89	09	300S	240E	4303716251	8123	Federal	OW	P		LISBON	UTU-015445	NESE						N9885
NW LISBON USA B-1 (B-614)	14	300S	240E	4303716468	8123	Federal		P		LISBON	UTSL-070008A	NENW						N9885
NW LISBON USA A-2 (D-810)	10	300S	240E	4303716471	8123	Federal		P		LISBON	UTU-14903	NESE						N9885
LISBON B-84	04	300S	240E	4303730054	8123	Federal	OW	S		LISBON	UTU-09179	NESW						N9885
LISBON B-814	14	300S	240E	4303730082	8123	Federal	OW	S		LISBON	UTSL-070008A	NESW						N9885
LISBON C-99	09	300S	240E	4303730693	8123	Federal	OW	P		LISBON	UTU-09179	SWSE						N9885
LISBON B-94	04	300S	240E	4303730695	8123	Federal	OW	S		LISBON	UTU-015445	SESW						N9885
LISBON C-910 I	10	300S	240E	4303731805	12892	Federal	D	PA		LISBON	UTU-0141903	SWSE						N9885
LISBON D-616	16	300S	240E	4303715049	8123	State	OW	P		LISBON	ML-13692	NENE		9120		9120		N9885
LISBON B-616	16	300S	240E	4303716242	8123	State	OW	S		LISBON	ML-8366	NESW		8689		8689		N9885
BELCO ST 4 (LISBON B-816)	16	300S	240E	4303716244	8123	State		A		LISBON	ML-8366	NESW		8730		9100		N9885
LISBON UNIT D-716	16	300S	240E	4303731034	8123	State	OW	P		LISBON	ML-13692	SENE		8794		8775		N9885
LISBON U B-610	10	300S	240E	4303716469	9740	Federal		P		LISBON (MCCRACKEN)	UTU-014903	NENW						N9885
LISBON U D-610	10	300S	240E	4303730694	9740	Federal		P		LISBON (MCCRACKEN)	UTU-014903	NENE						N9885
LISBON UNIT A-911	11	300S	240E	4303731014	9740	Federal		P		LISBON (MCCRACKEN)	UTSL-070008A	SWSW						N9885
LISBON C-910	10	300S	240E	4303731323	9740	Federal		P		LISBON (MCCRACKEN)	UTU-014903	SWSE						N9885
LISBON B-614A	14	300S	240E	4303731351	9740	Federal		TA		LISBON (MCCRACKEN)	UTSL-070008A	NENW						N9885
LISBON B-810	10	300S	240E	4303731433	9740	Federal		P		LISBON (MCCRACKEN)	UTU-014903	NESW						N9885
LISBON (MCCRACKEN) D-615	15	300S	240E	4303731817		Federal	OW	LA		LISBON (MCCRACKEN)	N9885							
LISBON (MCCRACKEN) A-610	10	300S	240E	4303731821		Federal	OW	LA		LISBON (MCCRACKEN)	N9885							
Dual Production (2 entities)																		

Delaware

PAGE 1

The First State

I, HARRIET SMITH WINDSOR, SECRETARY OF STATE OF THE STATE OF DELAWARE, DO HEREBY CERTIFY THE ATTACHED IS A TRUE AND CORRECT COPY OF THE CERTIFICATE OF MERGER, WHICH MERGES:

"TBI PIPELINE COMPANY", A DELAWARE CORPORATION,

"TBI WEST VIRGINIA, INC.", A DELAWARE CORPORATION,

"TOM BROWN, INC.", A DELAWARE CORPORATION,

WITH AND INTO "ENCANA OIL & GAS (USA) INC." UNDER THE NAME OF "ENCANA OIL & GAS (USA) INC.", A CORPORATION ORGANIZED AND EXISTING UNDER THE LAWS OF THE STATE OF DELAWARE, AS RECEIVED AND FILED IN THIS OFFICE THE TWENTY-SECOND DAY OF DECEMBER, A.D. 2004, AT 6:15 O'CLOCK P.M.

AND I DO HEREBY FURTHER CERTIFY THAT THE EFFECTIVE DATE OF THE AFORESAID CERTIFICATE OF MERGER IS THE FIRST DAY OF JANUARY, A.D. 2005.

A FILED COPY OF THIS CERTIFICATE HAS BEEN FORWARDED TO THE NEW CASTLE COUNTY RECORDER OF DEEDS.



2137895 8100M

040934710

Harriet Smith Windsor

Harriet Smith Windsor, Secretary of State

AUTHENTICATION: 3584585

DATE: 12-29-04

State of Delaware
Secretary of State
Division of Corporations
Delivered 06:15 PM 12/22/2004
FILED 06:15 PM 12/22/2004
SRV 040934710 - 2137895 FILE

**STATE OF DELAWARE
CERTIFICATE OF MERGER OF
DOMESTIC CORPORATIONS**

Pursuant to Title 8, Section 251(c) of the Delaware General Corporation Law, the undersigned corporation executed the following Certificate of Merger:

FIRST: The name of the surviving corporation is EnCana Oil & Gas (USA) Inc., and the names and jurisdictions of the corporations being merged into this surviving corporation are as follows:

Name
Tom Brown, Inc.
TBI Pipeline Company
TBI West Virginia, Inc.

Jurisdiction of Incorporation
Delaware corporation
Delaware corporation
Delaware corporation

SECOND: The Agreement and Plan of Merger has been approved, adopted, certified, executed and acknowledged by each of the constituent corporations.

THIRD: The name of the surviving corporation is EnCana Oil & Gas (USA) Inc., a Delaware corporation.

FOURTH: The Certificate of Incorporation of the surviving corporation shall be its Certificate of Incorporation.

FIFTH: The merger is to become effective on January 1, 2005.

SIXTH: The Agreement and Plan of Merger is on file at 950 17th Street, Suite 2600, Denver, Colorado 80202, the place of business of the surviving corporation.

SEVENTH: A copy of the Agreement and Plan of Merger will be furnished by the surviving corporation on request, without cost, to any stockholder of the constituent corporations.

IN WITNESS WHEREOF, said surviving corporation has caused this certificate to be signed by an authorized officer, the 17th day of December, A.D., 2004.

ENCANA OIL & GAS (USA) INC.

By: Mary A. Viviano
Mary A. Viviano, Secretary

7. **Federal and Indian Lease Wells:** The BLM and or the BIA has approved the merger, name change, or operator change for all wells listed on Federal or Indian leases on: BLM not yet BIA

8. **Federal and Indian Units:**

The BLM or BIA has approved the successor of unit operator for wells listed on: n/a

9. **Federal and Indian Communization Agreements ("CA"):**

The BLM or BIA has approved the operator for all wells listed within a CA on: n/a

10. **Underground Injection Control ("UIC")** The Division has approved UIC Form 5, **Transfer of Authority to Inject**, for the enhanced/secondary recovery unit/project for the water disposal well(s) listed on: n/a

DATA ENTRY:

1. Changes entered in the **Oil and Gas Database** on: 2/24/2005
2. Changes have been entered on the **Monthly Operator Change Spread Sheet** on: 2/24/2005
3. Bond information entered in RBDMS on: 2/24/2005
4. Fee/State wells attached to bond in RBDMS on: 2/24/2005
5. Injection Projects to new operator in RBDMS on: 2/24/2005
6. Receipt of Acceptance of Drilling Procedures for APD/New on: n/a

FEDERAL WELL(S) BOND VERIFICATION:

1. Federal well(s) covered by Bond Number: UT1005

INDIAN WELL(S) BOND VERIFICATION:

1. Indian well(s) covered by Bond Number: n/a

FEE & STATE WELL(S) BOND VERIFICATION:

1. (R649-3-1) The **NEW** operator of any fee well(s) listed covered by Bond Number RLB0007875
2. The **FORMER** operator has requested a release of liability from their bond on: n/a
The Division sent response by letter on: n/a

LEASE INTEREST OWNER NOTIFICATION:

3. (R649-2-10) The **FORMER** operator of the fee wells has been contacted and informed by a letter from the Division of their responsibility to notify all interest owners of this change on: n/a

COMMENTS:

Merger and rider of bond from Tom Brown, Inc.